

**STAFF REPORT
VOLUME II**

**REVISION OF THE CLEAN WATER ACT SECTION 303(d)
LIST OF WATER QUALITY LIMITED SEGMENTS**

**WATER BODY FACT SHEETS SUPPORTING
THE SECTION 303(d) RECOMMENDATIONS**



JANUARY 2003

**DIVISION OF WATER QUALITY
STATE WATER RESOURCES CONTROL BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**

Page left blank intentionally.

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER QUALITY

STAFF REPORT

REVISION OF THE CLEAN WATER ACT SECTION 303(d)
LIST OF WATER QUALITY LIMITED SEGMENTS

WATER BODY FACT SHEETS SUPPORTING
THE SECTION 303(d) RECOMMENDATIONS

VOLUME II

DRAFT

January 2003
FINAL

This is a draft document that is subject to revision.

Staff Report by the
Division of Water Quality
State Water Resources Control Board

***REVISION OF THE CLEAN WATER ACT SECTION 303(d)
LIST OF WATER QUALITY LIMITED SEGMENTS***

Water Body Fact Sheets Supporting the Section 303(d) Recommendations

Volume II

This Staff Report supporting the revision of the Clean Water Act Section 303(d) list of water quality limited segments has four parts: (1) Volume I contains the listing methodology and a summary of the proposed additions, deletions, changes, and priorities; (2) Volume II contains summaries of the proposals for the North Coast, San Francisco Bay, Central Coast, and Los Angeles Regional Water Quality Control Boards (RWQCBs); (3) Volume III contains summaries of the proposals for the Central Valley, Lahontan, Colorado River Basin, Santa Ana, and San Diego RWQCBs, and (4) Volume IV contains the responses to comments received. Each proposal is presented in a water body fact sheet.

This document is Volume II of the Staff Report. Proposed changes to the Section 303(d) list are included for the following RWQCBs:

- North Coast (Region 1)
- San Francisco Bay (Region 2)
- Central Coast (Region 3)
- Los Angeles (Region 4)

Each RWQCB section in this volume is divided into the following parts:

- Water Body Fact Sheets for each proposal
- Reference list of the data and information used

All data and information submitted after May 15, 2001 is included in the submittals presented in Volume IV.

Page left blank intentionally.

Regional Water Quality Control Board

NORTH COAST REGION (1)



SECTION 303 (d) LIST PROPOSALS

Page left blank intentionally.

Region 1: Albion River Sedimentation/Siltation

Water Body	Albion River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Big River Sedimentation/Siltation

Water Body	Big River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Big River Temperature

Water Body	Big River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds-Peer Reviewed Literature.
Water Body-specific Information	Data = 4 years (96-2000), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Data show that 29 out of 34 locations exceed the criterion of Sullivan, 2000= 14.8 degrees. But 23 locations had MWAT values exceeded for sub-lethal effects (10 and 20% reduced growth). None of the sites exceeded the 24 degree lethal criteria. 19 locations MWAT values exceeded the MWAT criteria (17 degrees) for sub-lethal effects (10% reduced growth). MWAT values at 4 locations exceeded the available MWAT criteria for sub-lethal effects (20% reduced growth).
Spatial representation	34 Locations over the 200 sq. mile area in the Big River watershed.
Temporal representation	Data was collected over 4 years (96-2000), with at least two years of record at 15 locations.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Streambank modification/destabilization, Removal of riparian vegetation, Habitat modification, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Watch List: Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is insufficient information existing to list. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Big River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds -Peer Reviewed Literature), that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Region 1: Big River Temperature

This conclusion is based on the staff findings that:

1. The data exhibited sufficient spatial and temporal coverage.
2. Beneficial uses apply to the water body.
3. Water quality standard used is applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Other water body- or site-specific information including the effects of season and age of the data were considered.

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Garcia River Sedimentation/Siltation

Water Body	Garcia River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 1: Gualala River Temperature

Water Body	Gualala River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Maximum Weekly Average Temperature (MWAT) linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 6 Years (1994-2000), Data measured at site, Species or indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	MWAT values exceeded criteria for sub-lethal effects (10 to 20% reduced growth) in the watershed at all or most locations. Maximum temperatures in one year at 15 locations was higher than 24 Degrees = Lethal.
Spatial representation	62 Locations over the 300 square mile area in the Gualala River Watershed.
Temporal representation	Data collected over 6 Years, with at least two years at 27 locations.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Streambank modification/destabilization, Removal of riparian vegetation, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Watch List: Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is insufficient information existing to list. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Gualala River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds -Peer Reviewed Literature), that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage. 2. Beneficial uses apply to the water body. 3. Water quality standard used is applicable.

Region 1: Gualala River

Temperature

4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Other water body- or site-specific information including the effects of season and age of the data were considered.

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Gualala River Sedimentation/Siltation

Water Body	Gualala River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Jacoby Creek Sediment

Water Body	Jacoby Creek
Stressor/Media/Beneficial Use	Sediment/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight and a QA Plan was submitted as a reference.
Linkage between measurement endpoint and beneficial use or standard	Turbidity linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality objectives for Sediment, settleable material and turbidity. Published Sedimentation Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 10 Years (1992-2002). Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Turbidity levels throughout the watershed from 1992- 2002, are recorded at levels detrimental to salmonids. Up to 1.6 feet of aggradation from 1992 to 2002 based on cross section surveys.
Spatial representation	Targeted Sites, 10 along the creek.
Temporal representation	Data collected over 10 years in 1992- 2002.
Data type	Numerical Data.
Use of standard method	Protocol/QAPP developed by Salmon Forever using EPA and USGS standard methods.
Potential Source(s) of Pollutant	Silviculture, Road construction, Land development, Nonpoint source, Natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>Most of the water quality measurements exceeded the water quality</p>

Region 1: Jacoby Creek

Sediment

standard. The staff confidence that standards were exceeded is high. Based on the review of available information the Beneficial Uses of Jacoby Creek are impacted due to sedimentation. The data have exceeded the criteria (Published Sedimentation Thresholds-Peer Reviewed Literature), used to translate the narrative Basin Plan Water Quality Objectives for sediment.

Region 1: Laguna de Santa Rosa

Sediment

Water Body	Laguna de Santa Rosa
Stressor/Media/Beneficial Use	Sediment/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species.
Data quality assessment. Extent to which data quality requirements met.	
Linkage between measurement endpoint and beneficial use or standard	
Utility of measure for judging if standards or uses are not attained	
Water Body-specific Information	The Russian River watershed was listed for Sedimentation/Siltation in 1998. This listing applies to Santa Rosa Creek. Estimated TMDL Completion Date is 2011.
Data used to assess water quality	
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Maintain listing.
SWRCB Staff Recommendation	Maintain listing.

Region 1: Laguna de Santa Rosa

Temperature

Water Body	Laguna de Santa Rosa
Stressor/Media/Beneficial Use	Temperature/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 5 years (1997-2001), Data measured at site, Species or indicator present at site , Environmental conditions considered at site.
Data used to assess water quality	All 26 locations had MWAT values exceeding the (Sullivan 2000) criteria of 14.8 and 17 Degrees, used to translate the narrative WQO for temperature.
Spatial representation	26 Site locations in the Russian River Watershed.
Temporal representation	More than one season for 5 years.
Data type	Numerical data.
Use of standard method	
Potential Source(s) of Pollutant	Flow regulation/modification, Removal of riparian vegetation, Habitat Modification, Nonpoint Sources.
Alternative Enforceable Program	
RWQCB Recommendation	Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is sufficient information and recommends to list the Russian River watershed. This listing includes the Laguna de Santa Rosa. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Russian River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds- Peer Reviewed Literature) that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	Based on a letter sent from the NCRWQCB on January 31, 2002 the SWQCB feels there is sufficient information and recommends to list the Russian River watershed. This listing includes the Laguna de Santa Rosa. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Russian River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds- Peer Reviewed Literature) that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.

Region 1: Laguna de Santa Rosa

Nutrients

Water Body	Laguna de Santa Rosa
Stressor/Media/Beneficial Use	Nutrients/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Nitrogen and Phosphorus linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	The RWQCB initially used a USEPA goal for phosphorus to interpret the data. The use of the phosphorus goal does not address the conditions present in the Laguna de Santa Rosa. There is significant disagreement over phosphorus limitation in the Laguna. The response of water bodies to nutrient enrichment differ among water bodies and one applicable nutrient objective is not available. USEPA and the state are in the process of developing nutrient objectives for the bioregions of California.
Water Body-specific Information	Data = 5-6 Years (1995-2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Even though there are 10 water chemistry samples, there is no applicable guideline that can be used to interpret the narrative standard. Even though a phosphorus goal is not applicable in this specific situation, it is clear that the Laguna de Santa Rosa does not meet standards for low dissolved oxygen. It is also clear that nutrient concentrations are a probable cause of the low oxygen concentrations. New monitoring should be completed that identifies the contribution of nutrients and their relationship to the observed low oxygen concentrations.
Spatial representation	Targeted Sites, 10 along the creek.
Temporal representation	Data collected over 4 seasons.
Data type	Numerical data.
Use of standard method	USEPA Standards, and Standard Methods for examination of Wastewater and Water.
Potential Source(s) of Pollutant	Point source, Nonpoint source, Internal nutrient cycling.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List. The Desired Goal used to determine the nutrients listing, does not take into consideration the nutrient cycling or site-specific conditions taking place in the Laguna de Santa Rosa. Placement on the Monitoring List will allow the RWQCB to better define and understand which pollutant contributes to or causes the low dissolved oxygen in the Laguna de Santa Rosa. Stakeholders have committed to work in cooperation with the RWQCB to develop a TMDL

Region 1: Laguna de Santa Rosa

Nutrients

analysis for dissolved oxygen that will provide a better understanding of nutrients and their influence in the Laguna de Santa Rosa. Nutrients will be addressed in the development of the Dissolved Oxygen TMDL. This stakeholder process should be transparent and inclusive of all participants.

Region 1: Laguna de Santa Rosa

Diazinon

Water Body	Laguna de Santa Rosa
Stressor/Media/Beneficial Use	Diazinon
Data quality assessment. Extent to which data quality requirements met.	
Linkage between measurement endpoint and beneficial use or standard	
Utility of measure for judging if standards or uses are not attained	
Water Body-specific Information	
Data used to assess water quality	In November, 1999 results from the City of Santa Rosa were non-detect for all pesticides, including diazinon. As presented in the RWQCB November 16, 2002 303(d) List Update Recommendations report, a 1997 Department of Pesticides Regulations study reported that two of the fifty two samples from the Russian River above the reporting limit, at concentrations above that believed to be detrimental to freshwater organisms. The RWQCB recommends placing the Russian River watershed on the Watch List for diazinon, but not specifying individual tributaries.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Exclude the Laguna de Santa Rosa from Listing for diazinon.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be excluded from Listing.</p> <p>This conclusion is based on the staff findings that only two of the water quality measurements exceeded the applicable water quality criteria. The RWQCB recommends placing the Russian River watershed on the Watch List for diazinon, but not specifying individual tributaries.</p>

Region 1: Laguna de Santa Rosa

Chromium, Copper, and Zinc

Water Body	Laguna de Santa Rosa
Stressor/Media/Beneficial Use	Chromium, Copper, and Zinc
Data quality assessment. Extent to which data quality requirements met.	
Linkage between measurement endpoint and beneficial use or standard	
Utility of measure for judging if standards or uses are not attained	
Water Body-specific Information	
Data used to assess water quality	Available copper, chromium, and zinc water quality and sediment data, including additional (new) data has submitted by the City of Santa Rosa collected from Santa Rosa Creek and Laguna de Santa Rosa. Comparison of these data to applicable criteria (maximum contaminant level, an agricultural criterion, public health goals, aquatic life criterion, and California Toxic Rule criteria) shows that all available data are below applicable criteria. The RWQCBs previous assessment did not include comparison to CTR. The City of Santa Rosa continues to monitor both Santa Rosa Creek and the Laguna de Santa Rosa for these metals, and the RWQCB will continue to review the results when available.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Exclude from Listing.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be excluded from Listing.</p> <p>This conclusion is based on the staff findings that none of the water quality measurements exceeded the applicable water quality criteria.</p>

Region 1: Laguna de Santa Rosa

Low Dissolved Oxygen

Water Body	Laguna de Santa Rosa
Stressor/Media/Beneficial Use	Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	WQO, RWQCB's Basin Plan Objective for Dissolved Oxygen.
Water Body-specific Information	Data = 5-6 Years (1995-2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Water Chemistry Total Samples n=1792, with 1612 below the 7.0 mg/L Objective.
Spatial representation	Data collected at 4 attainment points along the water body.
Temporal representation	Data collected over 4 seasons.
Data type	Numerical data.
Use of standard method	City of Santa Rosa Monitoring, North Coast RWQCB monitoring.
Potential Source(s) of Pollutant	Nonpoint source, Point Source, Internal nutrient cycling.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p> <p>A TMDL was completed for dissolved oxygen in 1995, but recent data</p>

Region 1: Laguna de Santa Rosa

Low Dissolved Oxygen

show that water quality objectives are not yet being met, and additional measures need to be taken to address this problem. Recently, the City of Santa Rosa in cooperation with the RWQCB has committed to fund a study to develop a TMDL analysis for dissolved oxygen that will be used to set waste load and load allocations for the Laguna de Santa Rosa.

Region 1: Lake Mendocino

Mercury

Water Body	Lake Mendocino
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight. TSMP QAPP was used.
Linkage between measurement endpoint and beneficial use or standard	Mercury is linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	U.S. EPA Tissue Residue Criterion.
Water Body-specific Information	Data = 3 years (1999 - 2001), Data measured at site, species present in the water body, environmental conditions considered at site.
Data used to assess water quality	The 1999 data show that all three of the fish samples exceed the U.S. EPA tissue residue criterion. The preliminary data from 2001 show that six of the ten samples exceed the U.S. EPA tissue residue criterion. These intensive monitoring studies of fish tissue mercury levels in Lake Mendocino in cooperation with the Office of Environmental Health and Hazard Assessment show that the mercury levels in Lake Mendocino exceed the U.S. EPA tissue residue criterion.
Spatial representation	Data were collected spatially within Lake Mendocino.
Temporal representation	Data were collected during May in the 1999 study and during September in the 2000 study.
Data type	Numerical data.
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Resource Extraction, Non-point Source
Alternative Enforceable Program	
RWQCB Recommendation	Monitoring List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used.

Region 1: Lake Mendocino

Mercury

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Lake Sonoma

Mercury

Water Body	Lake Sonoma
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight. TSMP QAPP was used.
Linkage between measurement endpoint and beneficial use or standard	Mercury is linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	U.S. EPA Tissue Residue Criterion.
Water Body-specific Information	Data = 3 years (1999 - 2001), Data measured at site, species present in the water body, environmental conditions considered at site.
Data used to assess water quality	The 1999 data show that all six of the fish samples exceed the U.S. EPA tissue residue criterion. The preliminary data from 2001 show that seven of the twelve samples exceed the U.S. EPA tissue residue criterion. These intensive monitoring studies of fish tissue mercury levels in Lake Sonoma in cooperation with the Office of Environmental Health and Hazard Assessment show that the mercury levels in Lake Sonoma exceed the U.S. EPA tissue residue criterion.
Spatial representation	Data were collected spatially within Lake Sonoma.
Temporal representation	Data were collected during May in the 1999 study and during September in the 2001 study.
Data type	Numerical data.
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Resource Extraction, Non-point Source
Alternative Enforceable Program	
RWQCB Recommendation	Monitoring List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used.

Region 1: Lake Sonoma

Mercury

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Mad River

Temperature

Water Body	Mad River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 4 years (97-2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	MWAT values at all 11 locations exceeded 20 degrees and are higher than the criteria for sub-lethal effects (10 to 20% reduced growth). Maximum temperatures at most of the 11 locations were higher than 24 Degrees (= Lethal) in most years.
Spatial representation	Targeted 11 sites along the 503 sq. miles of the creek.
Temporal representation	Data collected over 4 years. Data was available from 11 locations, with at least 2 years of record at most locations.
Data type	Numerical data.
Use of standard method	Monitoring was conducted as part of the permitting process from 1997-2000).
Potential Source(s) of Pollutant	Flow regulation/modification, Removal of riparian vegetation, Habitat modification, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Watch List: Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is insufficient information existing to list. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Mad River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds -Peer Reviewed Literature), that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage.

Region 1: Mad River

Temperature

2. Beneficial uses apply to the water body.
3. Water quality standard used is applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Other water body- or site-specific information including the effects of season and age of the data were considered.

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Mattole River

Sedimentation

Water Body	Mattole River
Stressor/Media/Beneficial Use	Sedimentation and Temperature/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species.
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC plan were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	In-stream sediment indicators linked to salmonid requirements. Temperature thresholds (MWAT) linked to salmonid sensitive life-stage requirements.
Utility of measure for judging if standards or uses are not attained	Basin Plan water quality objectives for sediment, settleable solids, and turbidity; published sediment thresholds from peer reviewed literature, aerial photo interpretation. Basin Plan water quality objective for temperature; Sullivan, et al 2000 published temperature thresholds, stream temperature modeling.
Water Body-specific Information	Analysis of 1941 to 2000 aerial photo sets. 2002 road and stream survey data. 1994-2001 stream temperature data. Riparian vegetation conditions throughout entire watershed. Thermal infrared survey of entire mainstem and six large tributaries. Water temperature data collected every 1-1.5 hours throughout summer.
Data used to assess water quality	Stream substrate parameters. Channel morphology responsive/vulnerable to increased flows and input of upslope sediment. Water temperature data collected every 1-1.5 hours throughout summer.
Spatial representation	Targeted 40 road and stream surveys; 44 square miles of aerial photo analysis, complete representation of current and potential stream shade conditions, thermal infrared survey of entire mainstem and six large tributaries; well distributed stream temperature monitoring.
Temporal representation	Aerial photo data collected represents a 60 year period, stream temperature data collected over seven years.
Data type	Numeric data, aerial photo analysis, measured instream parameters, remotely gathered thermal infrared and vegetation coverages.
Use of standard method	Forest Science Project stream temperature data collection protocol, WA State Watershed Analysis Manual.
Potential Source(s) of Pollutant	Road construction, Timber harvest activity, Livestock grazing-riparian/upland, and Natural sources, Silviculture, Logging Road Construction.
Alternative Enforceable Program	None.
RWQCB Recommendation	Maintain Listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the

Region 1: Mattole River Sedimentation

water body should not be removed from the section 303(d) list because applicable water quality standards are still exceeded and a pollutant contributes to or causes the problem. Maintain Listing. Original Listing Date:1993. Estimated TMDL Completion Date:1/06.

Region 1: Navarro River

Temperature

Water Body	Navarro River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Noyo River Sedimentation/Siltation

Water Body	Noyo River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Redwood Creek

Sedimentation

Water Body	Redwood Creek
Stressor/Media/Beneficial Use	Sedimentation/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species.
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC plan were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	In-stream sediment indicators linked to salmonid habitat requirements.
Utility of measure for judging if standards or uses are not attained	Basin Plan water quality objectives for sediment, settleable solids, and turbidity; published sediment thresholds from peer reviewed literature.
Water Body-specific Information	1975-1995: particle size distribution data; 1977-1999: channel morphology data; 1973-2000 suspended sediment data; 1999 turbidity data; 2002 road inventory data.
Data used to assess water quality	Fine sediment loads exceed TMDL thresholds, particularly in the lower watershed. Channel morphology responsive/ vulnerable to increased flows and input of upslope sediment. Suspended sediment loads do not consistently meet TMDL threshold. Road densities throughout basin exceed densities protective of water quality. 15% of roads have been decommissioned, and 6% have been upgraded.
Spatial representation	Targeted 4 to 15 sites (depending on variable) throughout 282 square mile watershed.
Temporal representation	Data collected over 25 year period.
Data type	Numerical data.
Use of standard method	USGS sampling. Peer-reviewed monitoring/sampling techniques.
Potential Source(s) of Pollutant	Harvest-related erosion, Road-related surface erosion, gullies, Road crossing failures, Natural landslides, Logging road construction, Natural sources, Erosion/Siltation.
Alternative Enforceable Program	None.
RWQCB Recommendation	Maintain Listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be removed from the section 303(d) list because applicable water quality standards are still exceeded and a pollutant contributes to or causes the problem. Original Listing Date: 1993. Estimated TMDL Completion Date: 7/07.

Region 1: Redwood Creek

Temperature

Water Body	Redwood Creek
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 7 years (94-2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	MWAT values at 23 of the 31 locations exceeded criteria (Sullivan 2000) for 14.8 degrees C. 10 locations exceeded the criteria sub-lethal effects (10% reduced growth) 17 degrees C. 5 locations in the estuary, 3 locations in the mainstem, and 1 on Lacks Creek exceeded the criteria available for (20% reduced growth) sub-lethal effects. Maximum temperatures at 6 locations were higher than 24 Degrees Celsius (= Lethal).
Spatial representation	Targeted sites 31 locations over the 294 sq. miles of the creek.
Temporal representation	Data was collected over 7 years (94-2001), with at least two years of record at 20 locations.
Data type	Numerical data.
Use of standard method	USGS sampling.
Potential Source(s) of Pollutant	Landslides in the Redwood Creek Watershed/Floods/Erosion of decommissioned roads, Removal of Riparian Vegetation, Streambank Modification/Destabilization, Erosion/Siltation, Nonpoint Sources.
Alternative Enforceable Program	
RWQCB Recommendation	Watch List: Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is insufficient information existing to list. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Ten Mile River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds-Peer Reviewed Literature), that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Region 1: Redwood Creek

Temperature

This conclusion is based on the staff findings that:

1. The data exhibited sufficient spatial and temporal coverage.
2. Beneficial uses apply to the water body.
3. Water quality standard used is applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Other water body- or site-specific information including the effects of season and age of the data were considered.

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Russian River Temperature

Water Body	Russian River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 5 years (1997-2001), Data measured at site, Species or indicator present at site , Environmental conditions considered at site.
Data used to assess water quality	All 26 locations had MWAT values exceeding the (Sullivan 2000) criteria of 14.8 and 17 Degrees, used to translate the narrative WQO for temperature.
Spatial representation	26 Site locations in the Russian River Watershed.
Temporal representation	More than one season for 5 years.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Flow regulation/modification, Removal of riparian vegetation, Habitat Modification, Nonpoint Sources.
Alternative Enforceable Program	
RWQCB Recommendation	Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is sufficient information and recommends to list this water body. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Russian River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds- Peer Reviewed Literature) that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage. 2. Beneficial uses apply to the water body. 3. Water quality standard used is applicable. 4. The evaluation guideline used to interpret narrative water quality

Region 1: Russian River Temperature

standards is adequate.

5. Data are numerical.

6. Other water body- or site-specific information including the age of the data were considered.

All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Russian River Pathogens

Water Body	Russian River
Stressor/Media/Beneficial Use	Pathogens/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Pathogens/Bacteria (i.e. Fecal coliform) to REC-1 Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives.
Water Body-specific Information	Data = 15 Years (1987-2001), Data measured at site, Species or indicator present at site, Environmental conditions considered at sites.
Data used to assess water quality	Bacterial Data : 72% of the fecal coliform data from 1986-1994 at Healdsburg Memorial Beach exceed the WQO. 75% of the fecal coliform data from 1992-1994 at Monte Rio beach exceed the WQO.
Spatial representation	Healdsburg Memorial Beach and Monte Rio Beach areas, sample sites unknown.
Temporal representation	All of the Samples were collected in the summer months.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Point sources, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. Data has shown these water bodies have exceeded the WQO for pathogens. List the Monte Rio area from the confluence of Dutch Bill Creek to the confluence of Fife Creek. Also list Healdsburg Memorial Beach from the Highway 101 crossing to the railroad crossing upstream of the beach.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage. 2. Beneficial uses apply to the water body. 3. Water quality standard used is applicable. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Other water body- or site-specific information including the age of the data were considered.

Region 1: Russian River Pathogens

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Santa Rosa Creek

Sediment

Water Body	Santa Rosa Creek
Stressor/Media/Beneficial Use	Sediment/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species.
Data quality assessment. Extent to which data quality requirements met.	
Linkage between measurement endpoint and beneficial use or standard	
Utility of measure for judging if standards or uses are not attained	
Water Body-specific Information	The Russian River watershed was listed for Sedimentation/Siltation in 1998. This listing applies to Santa Rosa Creek. Estimated TMDL Completion Date is 2011.
Data used to assess water quality	
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Maintain Listing
SWRCB Staff Recommendation	Maintain Listing

Region 1: Santa Rosa Creek

Temperature

Water Body	Santa Rosa Creek
Stressor/Media/Beneficial Use	Temperature/Water/Cold Freshwater Habitat; Spawning, Reproduction, and/or Early Development; Rare, Threatened, or Endangered Species.
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 5 years (1997-2001), Data measured at site, Species or indicator present at site , Environmental conditions considered at site.
Data used to assess water quality	All 26 locations had MWAT values exceeding the (Sullivan 2000) criteria of 14.8 and 17 Degrees, used to translate the narrative WQO for temperature.
Spatial representation	26 Site locations in the Russian River Watershed.
Temporal representation	More than one season for 5 years.
Data type	Numerical data.
Use of standard method	
Potential Source(s) of Pollutant	Flow regulation/modification, Removal of riparian vegetation, Habitat Modification, Nonpoint Sources.
Alternative Enforceable Program	
RWQCB Recommendation	Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is sufficient information and recommends to list the Russian River watershed. This listing includes Santa Rosa Creek. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Russian River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds- Peer Reviewed Literature) that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	Based on a letter sent from the NCRWQCB on January 31, 2002, there is sufficient information and recommends to list the Russian River watershed. This listing includes Santa Rosa Creek. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Russian River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds- Peer Reviewed Literature) that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.

Region 1: Santa Rosa Creek

Pathogens

Water Body	Santa Rosa Creek
Stressor/Media/Beneficial Use	Pathogens/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Pathogens/Bacteria (i.e. E. coli.) linked to REC-1 Beneficial Use.
Utility of measure for judging if standards or uses are not attained	CA. Draft DHS Guidance for Freshwater Beaches, Swimming Advisory Posting.
Water Body-specific Information	Data = 1-23 Years (1979/1980 and 2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Bacterial Data n=38, 19 exceeding draft DHS Guidance standards NOT enough data to show exceedance of REC-1 WQO -Bacteria, but enough to show exceedance of the DHS guidance. The DHS guidance for fresh water beaches, which was used to post a swimming advisory for this water body.
Spatial representation	Targeted Sites, 12 along the creek.
Temporal representation	Data collected over 12 days in June/July 2001 and also during 4 separate months in 1979/1980.
Data type	Numerical data.
Use of standard method	City of Santa Rosa and Draft CA. State DHS Guidance for Fresh Water Beaches.
Potential Source(s) of Pollutant	Point sources and Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage. 2. The evaluation guideline used is adequate. A Swimming Advisory for this waterbody is in effect, based on the use of this Draft CA. DHS Guidance for Fresh Water Beaches, impacting the Beneficial Use. There was not enough data to show exceedances of REC-1, WQO- Bacteria. 3. Data are numerical. 4. Standard methods were used. 5. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the DHS guidance. The staff confidence that standards were exceeded in high.</p>

Region 1: Santa Rosa Creek

Chromium, Copper, and Zinc

Water Body	Santa Rosa Creek
Stressor/Media/Beneficial Use	Chromium, Copper, and Zinc
Data quality assessment. Extent to which data quality requirements met.	
Linkage between measurement endpoint and beneficial use or standard	
Utility of measure for judging if standards or uses are not attained	
Water Body-specific Information	
Data used to assess water quality	Available copper, chromium, and zinc water quality and sediment data, including additional (new) data has submitted by the City of Santa Rosa collected from Santa Rosa Creek and Laguna de Santa Rosa. Comparison of these data to applicable criteria (maximum contaminant level, an agricultural criterion, public health goals, aquatic life criterion, and California Toxic Rule criteria) shows that all available data are below applicable criteria. The RWQCBs previous assessment did not include comparison to CTR. The City of Santa Rosa continues to monitor both Santa Rosa Creek and the Laguna de Santa Rosa for these metals, and the RWQCB will continue to review the results when available.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Exclude from Listing.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be excluded from Listing.</p> <p>This conclusion is based on the staff findings that none of the water quality measurements exceeded the applicable water quality criteria.</p>

Region 1: Santa Rosa Creek

Diazinon

Water Body	Santa Rosa Creek
Stressor/Media/Beneficial Use	Diazinon
Data quality assessment. Extent to which data quality requirements met.	
Linkage between measurement endpoint and beneficial use or standard	
Utility of measure for judging if standards or uses are not attained	
Water Body-specific Information	
Data used to assess water quality	In November of 1999 results by the City of Santa Rosa were non-detect for all pesticides, including diazinon. Presented in the RWQCB November 16, 2002 303(d) List Update Recommendations report, a 1997 Department of Pesticides Regulations study reported that two of the fifty two samples from the Russian River above the reporting limit, at concentrations above that believed to be detrimental to freshwater organisms. The RWQCB recommends placing the Russian River watershed on the Watch List for diazinon, but not specifying individual tributaries.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Exclude from Listing.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be excluded from Listing.</p> <p>This conclusion is based on the staff findings that none of the water quality measurements exceeded the applicable water quality criteria. The RWQCB recommends placing the Russian River watershed on the Watch List for diazinon, but not specifying individual tributaries.</p> <p>The tributaries of the Russian River should not be placed on the Monitoring List. The Russian River should be on the Monitoring List for diazinon.</p>

Region 1: South Fork Eel River

Temperature

Water Body	South Fork Eel River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: South Fork Eel River

Sedimentation/Siltation

Water Body	South Fork Eel River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: South Fork Trinity River/Hayfork Creek

Sedimentation/Siltation

Water Body	South Fork Trinity River/Hayfork Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Stemple Creek/Estero de San Antonio

Sediment

Water Body	Stemple Creek/Estero de San Antonio
Stressor/Media/Beneficial Use	Sediment/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	Turbidity linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality objectives for sediment. Published Sedimentation Thresholds- Peer Reviewed Literature.
Water Body-specific Information	Data = 5 Years (1996-2001), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Have a narrative Objective for Sediment and Turbidity, Have data from 5 years for turbidity measurements. The data have exceeded the criteria (Published Sedimentation Thresholds- Peer Reviewed Literature). used to translate the narrative Basin Plan Water Quality Objectives for Sediment.
Spatial representation	Targeted stations, 3 sites along creek
Temporal representation	Data collected over 5 sampling years.
Data type	Numerical data.
Use of standard method	Dept. Fish and Game.
Potential Source(s) of Pollutant	Soil Erosion, Nonpoint Source.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient, insufficient spatial and temporal coverage. 2. The evaluation guideline used to interpret narrative water quality standards is adequate. 3. Data are numerical. 4. Standard methods were used. 5. Other water body- or site-specific information including the effects of season and age of the data were considered. <p>A TMDL was approved in 1997 for this Watershed and "sediment" was inadvertently not included as a stressor in the original 303(d) List, it should have been included. All the elements for sediment are addressed in the 1997 TMDL, but sediment was not listed as a stressor, nutrients were.</p>

Region 1: Stemple Creek/Estero de San Antonio

Sediment

RWQCB wants to amend the 303(d) list to include sediment so that the TMDL can be completed. The data have exceeded the criteria (Published Sedimentation Thresholds- Peer Reviewed Literature) used to translate the narrative Basin Plan Water Quality Objectives for sediment.

Region 1: Ten Mile River

Sedimentation/Siltation

Water Body	Ten Mile River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Ten Mile River

Temperature

Water Body	Ten Mile River
Stressor/Media/Beneficial Use	Temperature/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	MWAT linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives/Historic Temperature Ranges/Sullivan 2000 Published Temperature Thresholds-Peer Reviewed Literature.
Water Body-specific Information	Data = 7 years (93-2000), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	Maximum recorded temperatures did not exceed 24 degrees at any of the locations. 31 out of the 37 locations exceeded the 14.8 criteria (Sullivan 2000). MWAT values at 17 locations exceeded the 17 degree MWAT criteria for sub-lethal effects (10% reduced growth) MWAT values at 3 of the locations exceeded the MWAT criteria for sub-lethal (20% reduced growth).
Spatial representation	Data were available from 37 locations.
Temporal representation	2 years of data were available for all of the 37 locations with the exception of 3 of them. 5 years of data were available from 26 locations.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Streambank modification/destabilization, Removal of riparian vegetation, Habitat modification, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Watch List: Based on a letter sent from the NCRWQCB on January 31, 2002 the RWQCB feels there is insufficient information existing to list. The Maximum Weekly Average Temperature (MWAT) and the Maximum Weekly Maximum Temperature (MWMT) values for the Ten Mile River Watershed exceed the criteria values (Sullivan, 2000 Published Temperature Thresholds -Peer Reviewed Literature), that were used to translate the narrative Water Quality Objective for Region 1 for Temperature.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

This conclusion is based on the staff findings that:

Region 1: Ten Mile River

Temperature

1. The data exhibited sufficient spatial and temporal coverage.
2. Beneficial uses apply to the water body.
3. Water quality standard used is applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Other water body- or site-specific information including the effects of season and age of the data were considered.

Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 1: Trinity River Sedimentation/Siltation

Water Body	Trinity River
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 1: Tule Lake and the Lower Klamath National Wildlife Refuge

pH

Water Body	Tule Lake and the Lower Klamath National Wildlife Refuge
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data with a QA/QC were given the greatest weight.
Linkage between measurement endpoint and beneficial use or standard	pH linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	Basin Plan Water Quality Objectives.
Water Body-specific Information	Data = 6 years (1992-1997), Data measured at site, Species or indicator present at Site, Environmental conditions considered at site.
Data used to assess water quality	For the Klamath Straights Data showed in 1996, 10 pH exceedances out of 15 measurements (7.9- 10 range), 1997 data showed 13 pH exceedances out of 15 measurements (8.1 - 10 Range). The 1992-95 data showed 3 exceedances out of 11 samples (4.6- 9.12 range). For the Tule Lake Data showed in 1996 10 pH exceedances out of 15 measurements (7.5 - 10.0 range). 1997 data showed 13 exceedances out of 15 measurements and the 1992-95 the data showed 7 exceedances out of 11 samples (range 5 - 10.2).
Spatial representation	Klamath Straights-sampling station/Tule Lake-Pump D sampling station.
Temporal representation	April through October Data from 1992-1997 for Klamath and Tule Lake.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Nonpoint sources, Internal nutrient cycling.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited sufficient spatial and temporal coverage. 2. Beneficial uses have been established. 3. Water quality standard used is applicable. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects of season and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. Data has shown that the pH values exceeded the WQO for pH.</p>

Region 1: Tule Lake and the Lower Klamath National Wildlife Refuge

pH

The staff confidence that standards were exceeded is high. List for pH for the portions of Tule Lake and Lower Klamath Lake National Wildlife Refuge.

Region 1: Van Duzen River/Yager Creek

Sedimentation/Siltation

Water Body	Van Duzen River/Yager Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Water Bodies Proposed for the Monitoring List in Region 1

Water Body	Pollutant/Stressor	Rationale
Alder Creek	Sediment and Temperature	<p>Data regarding instream conditions and sediment impact are not available in this watershed. Temperature data for Alder Creek provided by a recent survey (Pjerrou, 2001) indicate that high temperature levels may be a source of impairment of cold water fisheries in Alder Creek. Additional information on the temporal and spatial extent of elevated temperatures, including MWATs, are required to determine the extent of stream temperature impairment.</p> <p>Staff recommends conducting additional instream sediment and temperature assessments of Alder Creek to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sedimentation and/or elevated temperatures.</p>
Beith Creek	Sediment	<p>Beneficial uses of concern include those associated with cold water fisheries (commercial and sport fishing, spawning, reproduction, and/or early development). Chief threats are sedimentation and increased runoff, and possibly urban runoff (Farhi, 2001) Based on the available information, it is difficult to determine whether the instream sediment conditions are impairing the cold water fishery. Additional information on instream sediment conditions, channel aggradation, and historic and current fish presence/absence is necessary to determine whether water quality objectives are being exceeded and beneficial uses impaired.</p>
Brush Creek	Sediment	<p>Data suggests low impact by fine sediments on the streambed. However, further information regarding instream sediment conditions is necessary to verify the transport capacity for Brush Creek and evaluate the conditions of the other southern Mendocino Coast streams.</p> <p>Staff recommends conducting additional instream sediment assessments in these southern Mendocino Coast streams to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sediments.</p>
Casper Creek	Pathogens	<p>There is not enough data over a 30-day time period to make a determination of water quality objective exceedance for contact recreation, according to Basin Plan water quality objectives. While the results may be due to a residual effect of the sewer line break, the lack of baseline data makes it difficult to determine with any certainty. Given the anecdotal accounts of surfers getting sinusitis/ear infections, staff recommends putting Virgin Creek, Casper Creek, and Pudding Creek on the watch list and conducting baseline monitoring for pathogens to assess whether beneficial uses are threatened or impaired.</p>
Cottaneva Creek	Sediment	<p>Information regarding sediment loading, instream conditions, and sediment transport capacity of these streams is insufficient to determine whether beneficial uses are impaired. Staff recommends conducting instream sediment and temperature assessments of these northern Mendocino Coast streams to determine whether beneficial uses are impaired due to sediments.</p>

Water Body	Pollutant/Stressor	Rationale
Dehaven Creek	Sediment	Fish population data and timber harvest histories were not available for these watersheds. However, both these streams have been documented to provide historic habitat for coho salmon which are currently absent from the watersheds (Pjerrou, 2001). Due to lack of fish population data, it is difficult to determine whether the instream sediment conditions have impaired the cold water fishery and other beneficial uses. Staff recommends additional research to characterize historic fisheries conditions, as well as obtaining more information on harvest histories and instream conditions necessary for making a beneficial use impairment determination.
East Fork Trinity River	Mercury	An assessment of water quality around abandoned mine sites in Trinity County revealed that water quality standards are being met, except at the site of the Altoona mercury mine at the northern end of Trinity County above the East Fork of the Trinity River (Trinity Journal, 2001). A USGS monitoring program, to be completed in 2002, will evaluate the impact of abandoned mines such as the Altoona mine on federal lands in the Trinity River watershed. Staff recommends assessing the results of the study when available to determine whether beneficial uses are impaired by mercury.
Elk Creek	Sediment	<p>Data suggests low impact by fine sediments on the streambed. However, further information regarding instream sediment conditions is necessary to verify the transport capacity for Elk Creek and evaluate the conditions of the other southern Mendocino Coast streams.</p> <p>Staff recommends conducting additional instream sediment assessments in these southern Mendocino Coast streams to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sediments.</p>
Greenwood Creek	Sediment and Temperature	The most sensitive beneficial uses supported by Greenwood Creek include uses associated with the cold water fishery and municipal and domestic supply. There is conflicting evidence regarding the impairment of Greenwood Creek's instream conditions due to fine sediment. The results of all of these studies are mixed, and seem to indicate, at a minimum, the existence of localized degradation of streambed quality due to fine sediments. At this time, staff is unable to determine the contributing factors causing the impairment to the domestic water supply. It is unclear, based upon the available information, whether upstream timber harvest practices contributed to the bank erosion. Furthermore, temperature data from two locations on Greenwood Creek spanning six years of record from 1992 to 2000 indicate that high temperature levels may be a source of impairment of cold water fisheries in Greenwood Creek. Based on the complicated circumstances regarding the drinking water supply, as well as the mixed information on the instream sediment conditions in Greenwood Creek, staff recommends putting Greenwood Creek on the Monitoring List for sediment. Staff also recommends that Greenwood Creek be added to the Monitoring List for temperature, and that additional temperature monitoring at more locations throughout the watershed be conducted to evaluate possible temperature impairment of the cold water fishery.
Grotzman Creek	Sediment	Beneficial uses of concern include those associated with cold water fisheries (commercial and sport fishing, spawning, reproduction, and/or early development). Chief threats are sedimentation and increased runoff, and possibly urban runoff (Farhi, 2001). Based on the available information, it is difficult to determine whether the instream sediment conditions are impairing the cold water fishery. Additional information on instream sediment conditions, channel aggradation, and historic and current fish presence/absence is necessary to determine whether water quality objectives are being exceeded and beneficial uses impaired.

Water Body	Pollutant/Stressor	Rationale
Hardy Creek	Sediment	Information regarding sediment loading, instream conditions, and sediment transport capacity of these streams is insufficient to determine whether beneficial uses are impaired. Staff recommends conducting instream sediment and temperature assessments of these northern Mendocino Coast streams to determine whether beneficial uses are impaired due to sediments.
Howard Creek	Sediment	Information regarding sediment loading, instream conditions, and sediment transport capacity of these streams is insufficient to determine whether beneficial uses are impaired. Staff recommends conducting instream sediment and temperature assessments of these northern Mendocino Coast streams to determine whether beneficial uses are impaired due to sediments.
Humboldt Bay	PCBs and Dieldrin	Preliminary 1999-2000 data (SWRCB, 2001) from the State Mussel Watch Program (SMWP) shows levels of dieldrin and Total PCBs in transplanted California Mussels that exceed maximum tissue residue levels for enclosed bays and estuaries (Humboldt Del Norte Pier, C Street, and J Street). Given that the SMWP results are considered preliminary, and the lack of supporting information, staff recommends conducting additional monitoring at these sites for Total PCBs and dieldrin through the State Mussel Watch Program. Additional study may be conducted through the Surface Water Ambient Monitoring Program.
	Sediment	<p>According to accounts submitted for the 303(d) List update, sedimentation from streams which drain into the Bay, such as Jacoby Creek, has led to aggradation near the mouths of these creeks (Friedrichsen, 2001). Further, elevated turbidity and suspended solids can result in decreased light penetration through the water column, impacting aquatic plants such as eelgrass and the organisms dependent on them.</p> <p>It is not clear based on the available information whether water quality objectives are being exceeded and beneficial uses impaired in Humboldt Bay. Staff recommends additional study to determine whether beneficial uses are threatened due to sedimentation in Humboldt Bay.</p>
Juan Creek	Sediment	Information regarding sediment loading, instream conditions, and sediment transport capacity of these streams is insufficient to determine whether beneficial uses are impaired. Staff recommends conducting instream sediment and temperature assessments of these northern Mendocino Coast streams to determine whether beneficial uses are impaired due to sediments.
Klamath River	Sediment	Beneficial uses may be impaired in portions of the mainstem Klamath (particularly in the lower Klamath River) and tributaries to the Klamath River (Beaver Creek and tributaries to the Klamath below the confluence with the Trinity River have been specifically identified) due to excessive sediment loading and instream sediment conditions. Insufficient information is available at this time to make a listing determination. Staff recommends focused study of the instream sediment conditions to assess beneficial use impairment of the mainstem and tributaries.
Laguna de Santa Rosa	Nutrients	Even though there are 10 water chemistry samples, there is no applicable guideline that can be used to interpret the narrative standard. Even though a phosphorus goal is not applicable in this specific situation, it is clear that the Laguna de Santa Rosa does not meet standards for low dissolved oxygen. It is also clear that nutrient concentrations are a probable cause of the low oxygen concentrations. New monitoring should be completed that identifies the contribution of nutrients and their relationship to the observed low oxygen concentrations.

Water Body	Pollutant/Stressor	Rationale
Mad River Slough	PCBs	Preliminary 1999-2000 data (SWRCB, 2001) from the State Mussel Watch Program (SMWP) shows levels of Total PCBs in transplanted California Mussels sampled at the mouth of Mad River Slough that exceed maximum tissue residue levels for enclosed bays and estuaries. Given that the SMWP results are considered preliminary and there is little supporting information, staff recommends conducting additional monitoring of Mad River Slough for Total PCBs through the State Mussel Watch Program. Additional study may be conducted through the Surface Water Ambient Monitoring Program.
Mallo Pass Creek	Sediment	<p>Data suggests low impact by fine sediments on the streambed. However, further information regarding instream sediment conditions is necessary to verify the transport capacity for Mallo Pass Creek and evaluate the conditions of the other southern Mendocino Coast streams.</p> <p>Staff recommends conducting additional instream sediment assessments in these southern Mendocino Coast streams to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sediments.</p>
Pudding Creek	Pathogens	There is not enough data over a 30-day time period to make a determination of water quality objective exceedance for contact recreation, according to Basin Plan water quality objectives. While the results may be due to a residual effect of the sewer line break, the lack of baseline data makes it difficult to determine with any certainty. Given the anecdotal accounts of surfers getting sinusitis/ear infections, staff recommends putting Virgin Creek, Casper Creek, and Pudding Creek on the watch list and conducting baseline monitoring for pathogens to assess whether beneficial uses are threatened or impaired.
Russian River	Diazinon	<p>In November of 1999 results by the City of Santa Rosa were non-detect for all pesticides, including diazinon. Presented in the RWQCB November 16, 2002 303(d) List Update Recommendations report, a 1997 Department of Pesticides Regulations study reported that two of the fifty two samples from the Russian River above the reporting limit, at concentrations above that believed to be detrimental to freshwater organisms. The RWQCB recommends placing the Russian River watershed on the Watch List for diazinon, but not specifying individual tributaries.</p> <p>The tributaries of the Russian River should not be placed on the Monitoring List. The Russian River should be on the Monitoring List for diazinon.</p>
Schooner Gulch	Sediment	<p>Data suggests low impact by fine sediments on the streambed. However, further information regarding instream sediment conditions is necessary to verify the transport capacity for Schooner Gulch and evaluate the conditions of the other southern Mendocino Coast streams.</p> <p>Staff recommends conducting additional instream sediment assessments in these southern Mendocino Coast streams to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sediments.</p>
Shasta River	Sediment and Nutrients	Information on instream sediment and nutrient conditions available during the 303(d) List update process was insufficient to determine whether water quality objectives are being met and beneficial uses supported in the Shasta River. Staff recommends additional assessment of instream sediment conditions, to evaluate whether beneficial uses are currently impaired as a result of excessive sediment.

Water Body	Pollutant/Stressor	Rationale
Tule Lake and Lower Klamath Lake National Wildlife Refuge	Low Dissolved Oxygen and Unionized Ammonia	The available data are insufficient to support a listing for numeric objective exceedance. California does not have a standard for un-ionized ammonia. US EPA criteria were used for assessment of available data collected in 1996-1997. The US EPA criteria vary depending on temperature, pH and sensitive species present; the criteria become stricter as pH and temperature increase. Based on the information available during the 303(d) List update period, there are not sufficient data to list these surface waters for un-ionized ammonia. These surface waters should, however, be prioritized for additional un-ionized ammonia testing, including pH and water temperature. Additional work is suggested to evaluate the toxicity of un-ionized ammonia and the protection of the beneficial uses of these water bodies. In addition, the seasonal status of un-ionized ammonia concentrations should be examined.
Usal Creek	Sediment	The available data suggest that instream sediment conditions may contribute to a decline in the salmonid fishery. Staff recommends conducting additional instream monitoring and fish population surveys to determine whether spawning and rearing habitat of cold water fisheries and other beneficial uses are impaired due to sedimentation.
Virgin Creek	Pathogens	There is not enough data over a 30-day time period to make a determination of water quality objective exceedance for contact recreation, according to Basin Plan water quality objectives. While the results may be due to a residual effect of the sewer line break, the lack of baseline data makes it difficult to determine with any certainty. Given the anecdotal accounts of surfers getting sinusitis/ear infections, staff recommends putting Virgin Creek, Casper Creek, and Pudding Creek on the watch list and conducting baseline monitoring for pathogens to assess whether beneficial uses are threatened or impaired.
Wages Creek	Sediment	Fish population data and timber harvest histories were not available for these watersheds. However, both these streams have been documented to provide historic habitat for coho salmon which are currently absent from the watersheds (Pjerrou, 2001). Due to lack of fish population data, it is difficult to determine whether the instream sediment conditions in Dehaven and Wages Creeks have impaired the cold water fishery and other beneficial uses. Staff recommends additional research to characterize historic fisheries conditions, as well as obtaining more information on harvest histories and instream conditions necessary for making a beneficial use impairment determination.

Page left blank intentionally.

Reference List for Region 1

Staff Report

California Regional Water Quality Control Board. North Coast Region. 2001. 303(d) List Update Recommendations. November 16, 2001.

Contacts

Acker, Charles. Elk County Water District, 12/5/1997
Acker, Charles. Elk County Water District, 5/10/2001
Adelman, Brenda. Russian River Watershed Protection Committee, 5/15/2001
Alden, Henry. Gualala Redwoods, Inc., 9/26/2001
Ambrose, Jon. Georgia-Pacific Corporation, 12/11/1997
Blue, Gerry. 5/10/2001
Boland, Margaret J. Department of Agriculture, 5/14/2001
Booth, Lyn. Environmental Health Department, 5/14/2001
Brauner, Ed. City of Santa Rosa, 10/8/2001
Brown, Jon C. Department of Parks and Mendocino, 2/20/2001
Brown, Margaret. private citizen, 12/10/1997
Brucker, Peter. Salmon River Restoration Council, 5/14/2001
Bush, Bernard. Redwood Creek Landowners Assoc., 10/8/2001
Cissne, John M. 4/13/2001
Conner, Kelly. Fruit Growers Supply Company, 5/15/2001
de Vall, Norman. Greenwood Watershed Association, 12/11/1997
Dixon, Rex and Charlotte. 5/10/2001
Elliott, Richard L. Department of Fish and Game - Region 1, 12/1/1997
Euphrat, Fred. Forest, Soil & Water, Inc., 12/11/1997
Farhi, Seth. 5/14/2001
Fenton, Clark. Salmon Forever, 5/14/2001
Finger, Elizabeth. Jacoby Creek Protection Association, 5/14/2001
Friedrichsen, Gary L. 5/10/2001
Gienger, Richard. Sotoyome Resource Conservation District, 5/15/2001
Halstead, Ted. 4/7/2001
Herman, Thomas. Barnum Timber Co., 10/5/2001
Herman, Thomas M. Barnum & Herman, 5/11/2001
Hofstra, Terrence D. USDI, CDPR, Redwood National and State Parks, 5/15/2001
Kelly, Scott. HJW & Associates, Inc., 12/11/1997
Koch, Donald B. Department of Fish and Game - Region 1, 8/31/1998
Koch, Gene.

Koken, Angela. 5/10/2001

Madej, Mary Ann. USDI, USGS, Western Ecological Research Center, 5/11/2001

McEnhill, Don. Friends of the Russian River-RiverKeeper Project, 5/15/2001

McEnhill, Don. Friends of the Russian River-RiverKeeper Project, 5/15/2001

McEnhill, Don. Friends of the Russian River-RiverKeeper Project, 5/15/2001

Oliveri, Mary Jane. City of Santa Rosa Public Works Department, 5/15/2001

Pjerrou, Mary. Redwood Coast Watersheds Alliance, 5/14/2001

Pjerrou, Mary. Redwood Coast Watershed Alliance, 10/9/2001

Quinn, Scott. Karuk Tribe of California, 5/15/2001

Rische, Carol. Humboldt Bay Municipal Water District, 10/29/2001

Rosen, Elyssa. Sierra Club, 12/11/1997

Rosenblum, John. Rosenblum Environmental Engineering, 12/11/1997

Roth, James. Merritt Smith Consulting, 10/5/2001

Schmidt, Erik. 5/10/2001

Shulz, Tom. Louisiana-Pacific, 12/11/1997

Slota, Dennis. Mendocino County Water Agency, 5/15/2001

Small, Lynn M. City of Santa Rosa Utilities Department, 5/14/2001

Stansberry, Bob and Val. 5/12/2001

Starner, Keith. DPR, 4/26/2001

Surfleet, Chris. Mendocino Redwood Company, 10/1/2001

Tarvin, Jay. Humboldt Bay Municipal Water District, 4/12/2001

Wunner, Robert. 5/10/2001

Technical References

Anderson, D. 1983. Status of Summer Steelhead Trout in Redwood Creek, Redwood National Park, California. In S. Viers, J. Stohlgren, and C. Schonewald-Cox, ed. Proceedings of the Fourth Conference on Research in California's National Parks, Transactions and Proceedings Series 9. T, 1-8. U.S. DOI, National Park Service.

Bisson, P., Bilby, R. 1991. Avoidance of Suspended Sediment by Juvenile Coho Salmon. North American Journal of Fisheries Management, 4:371-374.

Brown, L. and Moyle, P. 1991. Status of Coho Salmon in California. Report to the National Marine Fisheries Service. Department of Fisheries and Wildlife - University of California at Davis.

Brungs, J., Jones, B. 1977. Temperature Criteria for Freshwater Fish: Protocol and Procedures. Environmental Research Laboratory - Duluth. US EPA.

Burns, J.W. 1970. Spawning Bed Sedimentation Studies in North California Streams. California Fish and Game 56(4). Pages 253-279.

California Department of Fish and Game. 1995. Stream Inventory Reports for Usal Creek and South Fork Usal Creek.

California Department of Fish and Game. Temperature monitoring data 1999.

California Department of Health Services. July 24, 2001. Draft Guidance for Fresh Water Beaches.

California Department of Pesticide Regulation. December 1997. Temporal Distribution of Insecticide Residue in Four California Rivers. Report No. EH97-06.

California EPA - Office of Environmental Health Hazard Assessment. March 2000. Draft Evaluation of Potential Health Effects of Eating from Black Butte Reservoir (Glenn and Tehama Counties): Guidelines for Sport Fish Consumption.

California State Water Resources Control Board. 1998. Chemical and Biological Measures of Sediment Quality and Tissue Bioaccumulation in the North Coast Region - Final Report. Bay Protection and Toxic Cleanup Program.

California State Water Resources Control Board. 2001. State Mussel Watch Program: Preliminary Summary of 1999-2000 Data.

Campbell Timberland Management, LLC. Gulch 11/South Fork Ten Mile River THP No. 1-00-138 MEN.

Campbell Timberland Management. One Way Truck Road Timber Harvest Plan. # 1-01-080 MEN, submitted 3/22/01.

Campbell Timberland Management. Estimated Aquatic Vertebrate Populations North and South Forks Usal Creek 1993-2000.

Campbell Timberland Management. Scudder Gulch Timber Harvest Plan. #1-01-172 MEN, Submitted 5/15/01.

City of Santa Rosa Utilities Department: Subregional Water Reclamation System. Laguna Subregional Wastewater Collection, Treatment and Disposal Facility Self-monitoring reports for 2000 and 2001.

City of Santa Rosa. June - July 2001. Self-monitoring data.

Department of Fish and Game. December 6, 2000. Marin-Sonoma Counties Agricultural Runoff Influence Investigation: 1999 - 2000 Summary. Appended data 1990 - 1998.

Department of Fish and Game. Marin-Sonoma Counties Agricultural Runoff Influence Investigation: 2001 data.

Department of Forestry and Fire Protection, Coast-Cascade Region. 1994-1997. Water Temperatures on Jackson Demonstration State Forest.

Elliot, J. 1981. Some Aspects of Thermal Stress on Freshwater Teleosts. Pages 209-245 in A.D. Pickering, editor. Stress and Fish. Academic Press, London.

Forest, Soil & Water. 1996. Greenwood Creek Stream Survey: Data Analysis and Recommendations.

Georgia Pacific West, Inc. So. Fork Ten Mile River THP No. 1-99-167 MEN.

Gualala Redwoods Inc. 2001. Stream Report. Unpublished report.

Hawthorne Timber Co. North Side Smith THP No. 1-01-206 MEN.

Jobling, M. 1981. Temperature tolerance and the final preferendum - rapid methods for the assessment of optimum growth temperatures. *Journal of Fish Biology*. 19:439-455.

Jong, B. 1994. Chinook Salmon Spawning Habitat Quality Evaluation Studies: Shasta River and South Fork Trinity River Basins. California Department of Fish and Game.

Klein, R. 2001. Suspended Sediment Concentrations and Fluxes in Redwood Creek Tributaries. Unpublished data.

Knopp, C. 1993. Testing Indices of Cold Water Fish Habitat. North Coast Regional Water Quality Control Board in cooperation with the California Department of Forestry.

Lewis, T. et al. 2000. Regional Assessment of Stream Temperatures Across Northern California and their Relationship to Various Landscape-Level and Site-Specific Attributes. Forest Science Project. Humboldt State University Foundation, Arcata, CA. 420 pp.

Ligon, F. et al. 1999. Report of the Scientific Review Panel on California Forest Practice Rules and Salmonid Habitat. Prepared for the Resources Agency of California and the National Marine Fisheries Service. Sacramento, California.

Lisle, T. and S. Hilton. 1992. The Volume of Fine Sediment in Pools: An Index of Sediment Supply in Gravel-Bed Streams. *Water Resources Bulletin* Volume 28, No. 2.

Lisle, T. and S. Hilton. 1999. Fine Bed Material in Pools of Natural Gravel Bed Channels. *Water Resources Research*. Volume 35, No. 4.

Madej, M. 1984. Recent Changes in Channel-Stored Sediment Redwood Creek, California. Report for Redwood National Park.

- Madej, M. 1999. Temporal and Spatial Variability in Thalweg Profiles of a Gravel-Bed River. *Earth Surface Processes and Landforms* 24, 1153-1169.
- Marshack, J. 2000. A Compilation of Water Quality Goals. Regional Water Quality Control Board, Central Valley Region.
- Meehan, W. (Editor) 1991. Influences of Forest and Rangeland Management of Salmonid Fishes and Their Habitat. American Fisheries Society Special Publication 19. American Fisheries Society.
- Mendocino Redwood Company. THP No. 1-01-316 MEN.
- Mendocino Redwood Company. THP No. 1-01-358 MEN.
- Mendocino Redwoods Company. Beeside Timber Harvest Plan. #1-01-104 MEN, submitted 5/10/01.
- Mendocino Redwoods Company. Section 27 II Timber Harvest Plan. #1-01-072 MEN, submitted 3/15/01.
- Natural Resources Management. Temperature monitoring data 1997-1999.
- NCRWQCB. 2001. Compilation of reported sediment data from Redwood Creek. Unpublished data.
- NCRWQCB. 2001. Database of Redwood Creek information.
- NCRWQCB. August 14, 1997. Executive Officer's Summary Report by Peter Otis.
- NCRWQCB. August 15, 2001. Gualala River Watershed Technical Support Document for the Total Maximum Daily Load for Sediment.
- NCRWQCB. August 15, 2001. Gualala River Watershed Technical Support Document for the Total Maximum Daily Load for Sediment.
- NCRWQCB. August 2, 2001. Draft Assessment of Aquatic Conditions in the Mendocino Coast Hydrologic Unit.
- NCRWQCB. August 2001. Memo to file. Stemple Creek 303(d) Listing history.
- NCRWQCB. February 28, 1996. Draft Report: Sediment Sample Results for Organic Chemicals, Metals, and Nutrients in the Laguna de Santa Rosa/Mark West Creek System and the Russian River 1985-1986 and 1995.
- NCRWQCB. May 1996. Water Quality Control Plan for the North Coast Region.
- NCRWQCB. Report to File "Russian River Bacteria Levels". December 6, 2001.
- NCRWQCB. Unpublished coliform data. 1979-1980.
- NCRWQCB. Unpublished Data. Data collected under a U.S. EPA Clean Water Act 104(b)(3) Water Quality Grant for Monitoring on the Klamath and Lost Rivers. Sampling occurred from April 3, 1996 through October 18, 1996 and from April 2, 1997 through October 24, 1997.
- NCRWQCB. Unpublished Laguna de Santa Rosa monitoring data. August/September 2001. Under contract with the Sonoma County Water Agency.
- NCRWQCB. Unpublished Russian River and Laguna de Santa Rosa monitoring data. 1997-2000.
- NCRWQCB. Unpublished Russian River coliform monitoring data. 1995-2001.
- Newcombe, C., Jensen, J. 1996. Channel Suspended Sediment and Fisheries: A Synthesis for Quantitative Assessment of Risk and Impact. *North American Journal of Fisheries Management*. November 1996.
- Ozaki, V. and C. Jones. 1998. Long-Term Channel Stability Monitoring on Redwood Creek, 1995-1997 Progress Report. Report for Redwood National Park.
- Ozaki, V., M. Madej and D. Anderson. 1998. Summer Water Temperature Monitoring on Redwood Creek. Progress Report. Redwood Creek National and State Park.
- Peterson, N., A. Hendry, and T. Quinnl 1992. Assessment of Cumulative Effects on Salmonid Habitat; Some Suggested Parameters and Target Conditions. Timber/Fish/Wildlife. TFW-F3-92-001.
- Rasmussen, D. 1990. Toxic Substances Monitoring Program Ten Year Summary Report 1978-1987. State Water Resources Control Board.
- Rasmussen, D. 1995. State Mussel Watch Program, 1987-1993 Data Report. Report No. 94-1 WQ. California State Water Resources Control Board.

- Rasmussen, D. 1995. Toxic Substances Monitoring Program 1992-1993 Data Report. State Water Resources Control Board.
- Rasmussen, D. 1997. Toxic Substances Monitoring Program 1994-1995 Data Report. State Water Resources Control Board.
- Rasmussen, D. 2000. State Mussel Watch Program, 1995-1997 Data Report. California State Water Resources Control Board.
- Redwood National and State Park, 2001. Unpublished temperature data.
- Redwood National and State Park. June 6, 2001. Unpublished fish survey data.
- Redwood National Park. 1999 RNSP Redwood Creek Summer Steelhead Trout Survey.
- Ricker, S. 1997. Evaluation of Salmon and Steelhead Spawning Habitat Quality in the Shasta River Basin, 1997. California Department of Fish and Game. Administrative Report No. 97-9.
- Santa Rosa Press Democrat, Empire News. August 4, 2001. Creek Pollution Unsolved.
- Sigler, J., Bjorunn, T., Everest, F. 1984. Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon. Transactions of the American Fisheries Society, 113:142-150. American Fisheries Society.
- Simpson Timber Co. Timber Harvest Plan 1-00-314-HUM.
- Sonoma County Water Agency. Stream temperature-monitoring data 1997- 1998.
- Sparkman, M. 2001. Redwood Creek Rotary Screw Trap Downstream Migration Study Redwood Valley, Humboldt County, California. April 4 – August 5, 2000.
- Spence, B., Lomnický, G., Hughes, R., Novitzki, R. 1996. An ecosystem approach to salmonid conservation. Report No. TR-4501-96-6057. ManTech Environmental Research Services Corporation, Corvallis, Oregon.
- State Water Resources Control Board. 2001. Toxic Substances Monitoring Program: Preliminary Summary of 1999 Data.
- Sullivan, K. et al. 2000. An Analysis of the Effects of Temperature on Salmonids of the Pacific Northwest with Implications for Selecting Temperature Criteria. Sustainable Ecosystem Institute.
- Trinity Journal. March 19, 2001. Little Mercury from Mining Found in Trinity Waters.
- US EPA. 1998. Redwood Creek Sediment Total Maximum Daily Load. US EPA Region IX.
- US EPA. 2001. Water Quality Criterion for the Protection of Human Health: Methylmercury. Report No. EPA-823-R-01-001.
- Van Kirk, S. 1994. Historical Information on Redwood Creek. Prepared for Redwood National Park.
- Winchester, W., R. Raymond and S. Tickle. 1995. Lost River Watershed Area in California (Tributary to the Klamath River): Water Quality Characteristics. North Coast Regional Water Quality Control Board. September 29, 1995.
- Yurok Tribal Fisheries Program. 2000. Lower Klamath River Sub-Basin Watershed Restoration Plan.

Page left blank intentionally.

Regional Water Quality Control Board

SAN FRANCISCO BAY REGION (2)



SECTION 303 (d) LIST PROPOSALS

Page left blank intentionally.

Region 2: Arroyo Hondo

Diazinon

Water Body	Arroyo Hondo
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life and Drinking water uses
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Only data of higher overall level of information were used.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life and Drinking water.
Utility of measure for judging if standards or uses are not attained	WQO, Basin Plan.
Water Body-specific Information	This water body was erroneously added to the 1998 as part of the Urban creek listing for Diazinon.
Data used to assess water quality	Listing Factor 3 mistake made in 1998 List. This water body was found to be not part of the Urban Creek tributaries listed on the 1998 list this creek isn't an urban creek at all. Field Reconnaissance in 2001, found this mistake.
Spatial representation	Data was spatially collected.
Temporal representation	Data was temporally collected.
Data type	Numerical data.
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because this body was listed as a mistake and never should have been listed as an Urban Creek.

Region 2: Arroyo Las Positas

Diazinon

Water Body	Arroyo Las Positas
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life (MIGR; SPWN; (COLD); (WARM))
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life Uses.
Utility of measure for judging if standards or uses are not attained	WQO, Basin Plan.
Water Body-specific Information	Water Body was added to the Basin Plan in 1995 as part of the Urban Creeks. It should have been listed in 1998, along with the other Urban Creeks for Diazinon.
Data used to assess water quality	List based on the criteria that was used to list Urban creeks in 1998. This water body should have been listed for Diazinon then, however due to an oversight by staff it was left off the 1998 list and should be placed on the 2002 list.
Spatial representation	Data was collected by RWQCB field reconnaissance in 2001.
Temporal representation	Data was collected by RWQCB field reconnaissance in 2001.
Data type	Numerical data.
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because it was an oversight to not list Arroyo Las Positas (13.5 miles) as part of the Urban Creeks in the San Francisco region.

Region 2: Arroyo Mocho

Diazinon

Water Body	Arroyo Mocho
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life (MIGR; SPWN; (COLD); (WARM))
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life Uses.
Utility of measure for judging if standards or uses are not attained	WQO, Basin Plan.
Water Body-specific Information	Water Body was added to the Basin Plan in 1995 as part of the Urban Creeks. It should have been listed in 1998, along with the other Urban Creeks for Diazinon.
Data used to assess water quality	List based on the criteria that was used to list Urban creeks in 1998. This water body should have been listed for Diazinon then, however due to an oversight by staff it was left off the 1998 list and should be placed on the 2002 list.
Spatial representation	Data was collected by RWQCB field reconnaissance in 2001.
Temporal representation	Data was collected by RWQCB field reconnaissance in 2001.
Data type	Numerical data.
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because it was an oversight not to list Arroyo Mocho (28.5 miles) as part of the Urban Creeks in the San Francisco region.

Region 2: Castro Cove, Richmond

Mercury, Selenium, PAHs, Dieldrin

Water Body	Castro Cove, Richmond
Stressor/Media/Beneficial Use	Mercury, Selenium, PAHs, Dieldrin/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Toxicity linked to aquatic life beneficial use.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	Data = 1 year.
Data used to assess water quality	Elevated sediment chemistry (ERM quotient), but only 1 sample, 0 and 33% amphipod survival--2 tests, significant urchin toxicity--1/3 samples, no benthic analyses.
Spatial representation	Samples were analyzed from of a number of sites in the Cove. The spatial extent of the chemical and sediment toxicity measurements are presented in the Consolidated Toxic Hot Spots Cleanup Plan.
Temporal representation	Data collected between 9/94- 5/95.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Point sources and possibly urban runoff.
Alternative Enforceable Program	<p>The Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be remediated. Responsible parties have been identified.</p> <p>ChevronTexaco has developed a remedial plan that will remove the polluted sediments. The plan was submitted to the RWQCB on June 7, 2002. The company is ready to implement the remedial plan as soon as a final decision on the disposal location of the removed sediments can be made. The company has also committed to spending approximately \$16,000,000 to implement the remedial plan and to fulfill their responsibility to address the polluted sediments. The RWQCB staff estimate the cleanup order will be issued within one year.</p>
RWQCB Recommendation	Monitoring List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program is addressing the problem.</p> <p>The water quality problem is being addressed by ChevronTexaco in partnership with the RWQCB. ChevronTexaco is committed to cleaning up Castro Cove as described in a remediation plan developed with the</p>

Region 2: Castro Cove, Richmond

Mercury, Selenium, PAHs, Dieldrin

RWQCB. The company is in the final stages of developing an enforcement order with the RWQCB to address the polluted sediments. Together they have developed a remedial action plan, which is estimated to cost \$16,000,000. This plan would remove polluted sediments from the Castro Cove and stands ready to be implemented as soon as a final decision on the disposal location of the removed sediments can be made.

Region 2: Central Basin, San Francisco

Mercury, PAHs

Water Body	Central Basin, San Francisco
Stressor/Media/Beneficial Use	Mercury, PAHs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity linked to aquatic life beneficial uses.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	Data = 2 years.
Data used to assess water quality	Slightly elevated sediment chemistry (ERM quotient), only 1 test, significant amphipod toxicity--1/2 tests significant, urchin toxicity--1/2 samples, no benthic analyses.
Spatial representation	Spatial distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Temporal representation	Temporal distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Not identified.
Alternative Enforceable Program	This site was identified as a moderate priority in the Consolidated Toxic Hot Spots Cleanup Plan. Remediation planning has yet to be completed.
RWQCB Recommendation	Monitoring List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used.

Region 2: Central Basin, San Francisco

Mercury, PAHs

An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 2: Islais Creek

PCBs, Chlordane, Dieldrin, Endosulfan sulfate, PAHs, anthropogenically +

Water Body	Islais Creek
Stressor/Media/Beneficial Use	PCBs, Chlordane, Dieldrin, Endosulfan sulfate, PAHs, anthropogenically enriched Hydrogen sulfide and Ammonia/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	<p>Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.</p> <p>SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.</p>
Linkage between measurement endpoint and beneficial use or standard	Sediment Toxicity and benthic community effects are linked to aquatic life beneficial uses.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used. WQO in the Basin Plan used.
Water Body-specific Information	Data = 3 years (94-97), Data measured at the site, Environmental Conditions considered at site.
Data used to assess water quality	<p>Elevated sediment chemistry (ERM quotient), Significant amphipod toxicity in 3/4 samples (75%), Significant urchin toxicity in 4/5 samples (80%), Relative benthic index = 0.22, 0.25, 0.43 (3 benthic gradient samples).</p> <p>SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data points in exceedance), the data shows 6/16 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit. Lead, mercury and zinc all consistently exceeded the ERM values at several stations in all three years surveys conducted. Levels of PAHs, PCBs, Chlordane, DDT and Dieldrin were at the highest detected levels at transect sampling stations 1N/S-4N/S with some pollutants in exceedance of the ERMs in 1998 only.</p>
Spatial representation	Data was spatially collected over the length of the Creek.
Temporal representation	Data was collected from 9/94- 9/97.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Combined Sewer Overflows/Industrial Point Sources.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be

Region 2: Islais Creek

PCBs, Chlordane, Dieldrin, Endosulfan sulfate, PAHs, anthropogenically +

remediated. Responsible parties have been identified.

RWQCB Recommendation

List: Current application of other regulatory authorities and the effects-based nature of the listing would give this listing a low-priority.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and pollutants contribute to or cause the problem.

This conclusion is based on the staff findings that:

1. The data is considered to be of adequate quality.
2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses apply and are applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Standard methods were used.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate. Even though there is an alternative enforceable program in place, corrective actions to remedy the problem have yet to be implemented. Based on the report provided by SFPUC staff recommend that the extent of impairment should include the portion of Islais Creek from the beginning of the creek up to and encompassing study transect sampling stations 1N/S-- 4N/S.

Region 2: Lake Merritt

Trash

Water Body	Lake Merritt										
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Habitat and REC uses										
Data quality assessment. Extent to which data quality requirements met.	No quality assurance information was provided.										
Linkage between measurement endpoint and beneficial use or standard	Trash linked to Aquatic Habitat and REC uses.										
Utility of measure for judging if standards or uses are not attained	Photographs can indicate gross impacts on beneficial uses and whether standards have been exceeded. Measurements of the amounts of trash can provide a relative measure of the potential for nuisance.										
Water Body-specific Information	Photographs were submitted that were taken on one occasion. The data for trash removed from the Lake was collect by Lake Merritt Institute volunteers between 1998 and 2001.										
Data used to assess water quality	<p>Lake Merritt volunteers have documented trash removal from the Lake. Large amounts of trash were collected in the Lake as follows:</p> <table> <tr> <th>Year</th><th>Amount (pounds)</th></tr> <tr> <td>1998</td><td>30,961</td></tr> <tr> <td>1999</td><td>39,233</td></tr> <tr> <td>2000</td><td>40,900</td></tr> <tr> <td>2001</td><td>20,640 (4 months only)</td></tr> </table> <p>Six photographs were submitted depicting what appeared to be locations in the Lake. The trash included accumulations of plastic bottles, styrofoam cups, paper wrappers, wood debris, aluminum cans, and other unidentifiable debris. A photograph was submitted depicting a dead bird in the lake wrapped in debris. Another bird death is reported as being caused by entanglement in a length of rope.</p>	Year	Amount (pounds)	1998	30,961	1999	39,233	2000	40,900	2001	20,640 (4 months only)
Year	Amount (pounds)										
1998	30,961										
1999	39,233										
2000	40,900										
2001	20,640 (4 months only)										
Spatial representation	Unknown.										
Temporal representation	Trash removal data collected monthly over 3 1/3 years. Cannot tell when the bird deaths occurred.										
Data type	Both numerical and non-numerical data.										
Use of standard method	No methods described.										
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.										
Alternative Enforceable Program	Possibly the urban storm water permits.										
RWQCB Recommendation	Change in listed water body. Change pollutant from Floating Material to Trash.										
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body pollutant should be changed in this already listed water body, from Floating Material to Trash.										

Region 2: Marina Lagoon (San Mateo Co.)

High Coliform Count

Water Body	Marina Lagoon (San Mateo Co.)
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	High Coliform Counts are linked to REC-1 uses.
Utility of measure for judging if standards or uses are not attained	Basin Plan objectives and Ocean Plan water contact standards used.
Water Body-specific Information	Data = 2 years (98-2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	192 samples for total coliform there were Basin Plan Objectives violated in 1% of the samples. Basin Plan Objectives violated in 50% of samples for total coliform median. Basin Plan Objectives violated in 10% of samples for fecal coliform geomean. Basin Plan Objectives violated in 33% of samples for fecal coliform 90th percentile in dry weather months. Basin Plan Objectives violated for E. coli data in 31% of the samples.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 10/7/98-10/31/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. Data are numerical. 6. Standard methods were used.

Region 2: Marina Lagoon (San Mateo Co.)

High Coliform Count

7. Other water body- or site-specific information including the effects of season and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Mission Creek

Silver, Chromium, Copper, Mercury, Lead, Zinc, Chlordane, Chlorpyrifos +

Water Body	Mission Creek
Stressor/Media/Beneficial Use	Silver, Chromium, Copper, Mercury, Lead, Zinc, Chlordane, Chlorpyrifos, Dieldrin, Mirex, PCBs, PAHs, anthropogenically enriched Hydrogen sulfide and Ammonia/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	<p>Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.</p> <p>SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Appropriate QA procedures were followed.</p>
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity and benthic community effects are linked to aquatic life beneficial uses.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	Data = 2 years (95-97), Data measured at the site, Environmental Conditions considered at site.
Data used to assess water quality	<p>BPTCP Data: Elevated sediment chemistry (ERM quotient) significant amphipod toxicity, 3/5 tests (60%) significant urchin toxicity, 3/5 samples (60%), relative benthic index = 0.00, 0.34, and 0.65 (3 benthic gradient samples).</p> <p>SWRCB received "Sediment Investigations at Islais Creek and Mission Creek-1998-1999-2000" provided by SFPUC. Six transects were monitored over three years and at corresponding North and South sampling stations for each transect (i.e. 1N, 1S). Excluding stations 5 and 6 (No data for 1999 and 2000), the data shows 4/20 sampling stations (1N/S-4N/S) indicate sediment toxicity and amphipod survival below the BPTCP reference tolerance limit. Lead, mercury, zinc, silver and nickel all exceeded the ERM values at several stations in all three years surveys conducted. Levels of PAHs, PCBs, Chlordane, DDT and Dieldrin were at the highest detected levels at transect sampling stations 1N/S-4N/S with some pollutants in exceedance of the ERMs in 1998 only.</p>
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 5/95-4/97.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Combined Sewer Overflows/Industrial Point Sources.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan presents a variety of corrective actions that need to be completed in order for the cove to be

Region 2: Mission Creek

Silver, Chromium, Copper, Mercury, Lead, Zinc, Chlordane, Chlorpyrifos +

remediated. Responsible parties have been identified.

RWQCB Recommendation

List: Current application of other regulatory authorities and the effects-based nature of the listing would give this listing a low-priority.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and pollutants contribute to or cause the problem.

This conclusion is based on the staff findings that:

1. The data is considered to be of adequate quality.
2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses apply and are applicable.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Standard methods were used.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate. Even though there is an alternative enforceable program in place, corrective actions to remedy the problem have yet to be implemented. Based on the report provided by SFPUC staff recommend that the extent of impairment should include the portion of Mission Creek from the beginning of the creek up to approximately 4th Street (encompassing study transect sampling stations 1N/S-- 4N/S).

Region 2: Oakland Inner Harbor (Fruitvale site)

Chlordane, PCBs

Water Body	Oakland Inner Harbor (Fruitvale site)
Stressor/Media/Beneficial Use	Chlordane, PCBs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sediment Toxicity linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (ERM quotient) for sediment used.
Water Body-specific Information	Data = 2 years. Data are 5 years old.
Data used to assess water quality	Slightly elevated sediment chemistry (ERM quotient), but only 1 sample, significant amphipod toxicity 2/2 tests, no significant urchin toxicity 2 tests, no benthic analyses.
Spatial representation	Spatial distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Temporal representation	Data collected during 4/95- 4/97.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Not identified.
Alternative Enforceable Program	This site was identified as a moderate priority in the Consolidated Toxic Hot Spots Cleanup Plan. Remediation planning has yet to be completed.
RWQCB Recommendation	Monitoring List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 2: Oakland Inner Harbor (Pacific Dry-dock Yard 1 site)

Copper, Lead, Mercury, Zinc, TBT, ppDDE, PCBs, PAHs, Chlorpyrifos, Chl +

Water Body	Oakland Inner Harbor (Pacific Dry-dock Yard 1 site)
Stressor/Media/Beneficial Use	Copper, Lead, Mercury, Zinc, TBT, ppDDE, PCBs, PAHs, Chlorpyrifos, Chlordane, Dieldrin, Mirex/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity linked to aquatic life beneficial uses.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	Data = 2 years. Data are 5 years old.
Data used to assess water quality	Elevated sediment chemistry (ERM quotient), significant amphipod toxicity 2/4 tests, no significant urchin toxicity (4 tests), no benthic analyses.
Spatial representation	Spatial distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Temporal representation	Data collected during 4/95- 4/97.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Not identified.
Alternative Enforceable Program	This site was identified as a moderate priority in the Consolidated Toxic Hot Spots Cleanup Plan. Remediation planning has yet to be completed.
RWQCB Recommendation	Monitoring List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 2: Pacific Ocean at Baker Beach

High Coliform Count

Water Body	Pacific Ocean at Baker Beach
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	USEPA Storet data. QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and fecal coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO, Ocean Plan used.
Water Body-specific Information	Data = 11 months (7/97-5/98), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 164 samples total. Ocean Plan objectives violated in 9.7% of the samples for total coliform in dry-weather months. Combined sewer overflow events are not considered because all CSOs in the vicinity have been directed away from Lobos Creek drainage onto Baker Beach.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 7/1/97-5/29/98.
Data type	Numerical data.
Use of standard method	USEPA methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Combined Sewer Overflows.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.

Region 2: Pacific Ocean at China Beach

Beach Closures

Water Body	Pacific Ocean at China Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1.
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Beach Closures linked to REC-1.
Utility of measure for judging if standards or uses are not attained	USEPA Guidance (1996).
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The data show that no beach closures occurred on this beach from 1998-2002. The original RWQCB recommendation to list was based on rainfall and combined sewer overflow events. This data must not be considered since all CSOs in the city are treated and therefore do not result in beach closures. The recommendation was also based on NRDC data which lead the RWQCB to make recommendations on beach advisories or warnings, not actual beach closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Combined Sewer Overflows.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	The SFRWQCB discovered erroneous available information on which they relied to make recommendations to the 303(d) list. Specifically, "Testing the Waters, 2000", authored by the Natural Resources Defense Council (NRDC), intermingled posted beach warnings with beach closures, leading us to make recommendations for listing for beach closures that were based only on beach advisories or warnings. The EPA guidance used in the 303(d) analysis is only pertinent to evaluation of beach closure information, where more than one beach closure per year, or one beach closure over one week duration, both constitute adequate basis for inclusion in the 303(d) list. Therefore, the RWQCB re-examined the original rationale for beach closure-related listings, to verify whether or not the recommendations were made on posted warnings or actual closures. They recommend to exclude Pacific Ocean at China Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because

Region 2: Pacific Ocean at China Beach

Beach Closures

applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Fitzgerald Marine Reserve

High Coliform Count

Water Body	Pacific Ocean at Fitzgerald Marine Reserve
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan and Basin Plan used.
Water Body-specific Information	Data = 3 years (5/98-10/00), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 49 samples total. Ocean Plan Objectives violated in 43% of the samples for total coliform in dry-weather months. Basin Plan Objectives were violated in 16% of samples for log mean, and in 73% of samples in dry weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 5/98-10/98, 5/99-10/99 and 5/00-10/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Department. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used.

Region 2: Pacific Ocean at Fitzgerald Marine Reserve

High Coliform Count

8. Other water body- or site-specific information including the effects of season, and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Pacific Ocean at Fitzgerald Marine Reserve

Beach Closures

Water Body	Pacific Ocean at Fitzgerald Marine Reserve
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan and Ocean Plan used.
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The information used to recommend this listing from the NRDC report was based on the SWRCB's year 2000 beach advisory postings, and not actual closures. A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "postings", and not actual closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	We recommend excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Fitzgerald Marine Reserve from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Fort Funston Beach

Beach Closures

Water Body	Pacific Ocean at Fort Funston Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Beach Closures linked to REC-1.
Utility of measure for judging if standards or uses are not attained	USEPA Guidance (1996).
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The data show that no beach closures occurred on this beach from 1998-2002. The original RWQCB recommendation to list was based on rainfall and combined sewer overflow events. This data must not be considered since all CSOs in the city are treated and therefore do not result in beach closures. The recommendation was also based on NRDC data which lead the RWQCB to make recommendations on beach advisories or warnings, not actual beach closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Combined Sewer Overflows.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	The SFRWQCB discovered erroneous available information on which they relied to make recommendations to the 303(d) list. Specifically, "Testing the Waters, 2000", authored by the Natural Resources Defense Council (NRDC), intermingled posted beach warnings with beach closures, leading us to make recommendations for listing for beach closures that were based only on beach advisories or warnings. The EPA guidance used in the 303(d) analysis is only pertinent to evaluation of beach closure information, where more than one beach closure per year, or one beach closure over one week duration, both constitute adequate basis for inclusion in the 303(d) list. Therefore, the RWQCB re-examined the original rationale for beach closure-related listings, to verify whether or not the recommendations were made on posted warnings or actual closures. They were not made on actual beach closures. They recommend to exclude Pacific Ocean at Fort Funston Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the

Region 2: Pacific Ocean at Fort Funston Beach

Beach Closures

water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Ocean Beach

Beach Closures

Water Body	Pacific Ocean at Ocean Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Beach Closures linked to REC-1.
Utility of measure for judging if standards or uses are not attained	USEPA Guidance (1996).
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The data show that no beach closures occurred on this beach from 1998-2002. The original RWQCB recommendation to list was based on rainfall and combined sewer overflow events. This data must not be considered since all CSOs in the city are treated and therefore do not result in beach closures. The recommendation was also based on NRDC data which lead the RWQCB to make recommendations on beach advisories or warnings, not actual beach closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Combined Sewer Overflows.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	The SFRWQCB discovered erroneous available information on which they relied to make recommendations to the 303(d) list. Specifically, "Testing the Waters, 2000", authored by the Natural Resources Defense Council (NRDC), intermingled posted beach warnings with beach closures, leading us to make recommendations for listing for beach closures that were based only on beach advisories or warnings. The EPA guidance used in the 303(d) analysis is only pertinent to evaluation of beach closure information, where more than one beach closure per year, or one beach closure over one week duration, both constitute adequate basis for inclusion in the 303(d) list. Therefore, the RWQCB had to re-examine the original rationale for beach closure-related listings, to verify whether or not the recommendations were made on posted warnings or actual closures. They were not made on actual closures and they recommend to exclude Pacific Ocean at Ocean Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the

Region 2: Pacific Ocean at Ocean Beach

Beach Closures

water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Pacifica State Beach (Linda Mar or San Ped + High Coliform Count

Water Body	Pacific Ocean at Pacifica State Beach (Linda Mar or San Pedro Beach)
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 3 years (1/98-1/01), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 36 wet weather samples. Ocean Plan Objectives violated in 22% of samples for total coliform in wet-weather months. This listing is driven by wet weather only. Ocean Plan objectives violated in 19% of samples for fecal coliform. No exceedances between May and October. Wet weather exceedances.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 1/98-1/01.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical.

Region 2: Pacific Ocean at Pacifica State Beach (Linda Mar or San Ped + High Coliform Count)

7. Standard methods were used.

8. Other water body- or site-specific information including the effects of season and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Pacific Ocean at Pacifica State Beach (Linda Mar or San Ped + Beach Closures

Water Body	Pacific Ocean at Pacifica State Beach (Linda Mar or San Pedro Beach)
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The data show that since Spring of 1998 no closures at this beach have been reported. The information used to recommend this listing from the NRDC report was based on the SWRCB's year 2000 beach advisory postings, and not actual closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "precautionary postings", and not actual closures. As such, the RWQCB recommends excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Pacifica State Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Pillar Point Beach

Beach Closures

Water Body	Pacific Ocean at Pillar Point Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO, Ocean Plan.
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The information used to recommend this listing from the NRDC report was based on the SWRCB's year 2000 beach advisory postings, and not actual closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "precautionary postings", and not actual closures. As such, the RWQCB recommends excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Pillar Point Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Pillar Point Beach

High Coliform Count

Water Body	Pacific Ocean at Pillar Point Beach
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 3 years (5/98-10/00), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 143 samples total. Ocean Plan objectives violated in 40% of samples for total coliform in dry-weather months. Ocean Plan objectives violated in 9% of the samples for log mean and 35% of the samples for fecal coliform in dry weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 5/98-10/98, 5/99-10/99 and 5/00-10/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used.

Region 2: Pacific Ocean at Pillar Point Beach

High Coliform Count

8. Other water body- or site-specific information including the effects of season and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Pacific Ocean at Rockaway Beach

High Coliform Count

Water Body	Pacific Ocean at Rockaway Beach
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 1 year (2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 23 samples total. Ocean Plan objectives violated in 13% of samples for total coliform in dry-weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 5/00-10/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the effects of season and age of the data were considered.

Region 2: Pacific Ocean at Rockaway Beach

High Coliform Count

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 2: Pacific Ocean at San Gregorio Beach

High Coliform Count

Water Body	Pacific Ocean at San Gregorio Beach
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used
Water Body-specific Information	Data = 3 years (98-2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 56 samples for total coliform, 23 samples for fecal coliform. Ocean Plan objectives violated in 5% of samples for total coliform in combined dry- and wet-weather months. Ocean Plan objectives violated in 8% samples for fecal coliform, wet-weather only. No exceedances between May and October. Listing driven by wet weather exceedances.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 9/98-3/01.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.

Region 2: Pacific Ocean at Sharp Park Beach

Beach Closures

Water Body	Pacific Ocean at Sharp Park Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Beach Closures linked to REC-1.
Utility of measure for judging if standards or uses are not attained	USEPA Guidance (1996)
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The information used to recommend this listing from the NRDC report was based on the SWRCB's year 2000 beach advisory postings, and not actual closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "precautionary postings", and not actual closures. As such, the RWQCB recommends excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Sharp Park Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Surfer's Beach

Total Coliform

Water Body	Pacific Ocean at Surfer's Beach
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 4 years (97-2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 134 total coliform samples, 126 fecal coliform samples. Ocean Plan objectives violated in 5% samples for total coliform in combined dry-weather and wet-weather months. Ocean Plan objectives violated in 9% of samples for fecal coliform in combined wet-dry weather. No exceedances between May and October. Listing driven by wet weather only.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 7/97-1/01.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the applicable water quality standards are not exceeded.

Region 2: Pacific Ocean at Surfer's Beach

Beach Closures

Water Body	Pacific Ocean at Surfer's Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 2000 Beach closure data.
Data used to assess water quality	The information used to recommend this listing from the NRDC report was based on the SWRCB's year 2000 beach advisory postings, and not actual closures.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "precautionary postings", and not actual closures. As such, the RWQCB recommends excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Surfer's Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) list because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Pacific Ocean at Venice Beach

High Coliform

Water Body	Pacific Ocean at Venice Beach
Stressor/Media/Beneficial Use	High Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 2 years (98-2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 30 samples. Ocean Plan violated in 13% of samples for total coliform in dry-weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 9/28/98-10/31/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the effects of season and age of the data were considered.

Region 2: Pacific Ocean at Venice Beach

High Coliform

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 2: Pacific Ocean at Venice Beach

Beach Closures

Water Body	Pacific Ocean at Venice Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Ocean Plan used.
Water Body-specific Information	Data = 2000 Beach closure data. Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	The beach closures were based on high coliform counts. Percent exceedances were calculated for the maximum, median, and geometric mean Basin Plan and Ocean Plan Objectives. There were exceedances of the objectives, and consistent with USEPA guidance (1996), the beach is recommended to be listed.
Spatial representation	Data was spatially collected.
Temporal representation	Data was temporally collected.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.
Alternative Enforceable Program	
RWQCB Recommendation	A review of the SWRCB information on San Mateo County beaches shows that the listings were recommended in error. All of the information in the NRDC report was based on SWRCB's year 2000 beach advisory "precautionary postings", and not actual closures. As such, the RWQCB recommends excluding five San Mateo County beaches from the 303(d) list recommendations for beach closures. The RWQCB recommends excluding Pacific Ocean at Surfer's Beach from listing.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This water body should be excluded from the 303(d) List, because the indicator used did not characterize beach conditions or represent standards exceedances.

Region 2: Petaluma River

Diazinon

Water Body	Petaluma River
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic life (WARM; MIGR)
Data quality assessment. Extent to which data quality requirements met.	Abelli-Amen, Petaluma Tree Planters data used. QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CDFG Acute Criterion, WQO
Water Body-specific Information	Data = 4 months (7/98-11/98), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 36 samples total. CDFG acute criteria for Diazinon was violated in 33% of the samples. The criteria was used to determine the exceedance of the WQO.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 7/98-11/98.
Data type	Numerical data.
Use of standard method	Abelli-Amen, Petaluma Tree Planters, RWQCB methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the effects of season and age of the data were considered.

Region 2: Petaluma River

Diazinon

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Petaluma River (tidal portion)

Nickel

Water Body	Petaluma River (tidal portion)
Stressor/Media/Beneficial Use	Nickel/Water/Aquatic Life (WARM, MIGR)
Data quality assessment. Extent to which data quality requirements met.	Used Regional Monitoring Program (RMP) and Special TMDL study QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Nickel linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR, WQO Basin Plan.
Water Body-specific Information	Data = 8 years (93-2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Using the CTR, there have been 4 exceedances since 1993, two were twice the Basin Plan Objective amounts.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 3/93-4/01.
Data type	Numerical data.
Use of standard method	Regional Monitoring Program (RMP) methods.
Potential Source(s) of Pollutant	Municipal Point Sources, Urban Runoff/Storm Sewers, Atmospheric Deposition.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the effects of season and age of the data were considered.

Region 2: Petaluma River (tidal portion)

Nickel

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate. List the Petaluma River (tidal portion) for nickel.

Region 2: Petaluma River (tidal portion)

Copper

Water Body	Petaluma River (tidal portion)
Stressor/Media/Beneficial Use	Copper/Water/Aquatic Life (WARM, MIGR)
Data quality assessment. Extent to which data quality requirements met.	Used Regional Monitoring Program (RMP) and Special TMDL study QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Copper linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan used.
Water Body-specific Information	Data = 8 years (93-2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	There were 15 exceedances since 1993. New information sent to the SWRCB in a memo on 2/26/02 changes this finding. The modified rationale, based on water effect ratio (WER) information, shows that copper levels are below applicable thresholds of impairment in the Petaluma River (tidal portion). Available water effect ratio (WER) data support the RWQCB recommendation to de-list copper.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 3/93-4/01.
Data type	Numerical data.
Use of standard method	Regional Monitoring Program (RMP) methods.
Potential Source(s) of Pollutant	Municipal Point Sources, Urban Runoff/Storm Sewers, Atmospheric Deposition.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	Exclude from the List. This listing was made in the Draft Staff report. However a memo sent on 2/26/02 made mention that the RB no longer wishes to list the mouth of the Petaluma river for copper. This finding to withdraw the recommendation is based on the modified rationale to list, based on Water Effect Ratio (WER) information. The new information shows the copper levels are below the threshold for exceedance, there is no need for the river to be listed.
SWRCB Staff Recommendation	Exclude from the List. SWRCB staff agrees with the RWQCB recommendation to withdraw this listing for 2002 due to new WER information.

Region 2: Peyton Slough

Silver, Cadmium, Copper, Selenium, Zinc, PCBs, Chlordane, ppDDE, Pyren +

Water Body	Peyton Slough
Stressor/Media/Beneficial Use	Silver, Cadmium, Copper, Selenium, Zinc, PCBs, Chlordane, ppDDE, Pyrene/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity linked to the aquatic life beneficial use. Benthic community effects are direct measures of the aquatic life beneficial use.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	Data = 2 years (95-97), Data measured at the site, Environmental Conditions considered at site.
Data used to assess water quality	Elevated sediment chemistry (ERM quotient), significant amphipod toxicity in 4/5 samples (80%), significant urchin toxicity--4/5 samples (80%), relative benthic index = 0.36, 0.51, 0.34 (3 benthic gradient samples).
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected, from 5/95-4/97.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Industrial Point Sources.
Alternative Enforceable Program	Peyton Slough is identified as a toxic hot spot in the SWRCB Consolidated Toxic Hot Spots Cleanup Plan SWRCB Resolution No. 99-065). This plan is being implemented through a Cleanup and Abatement Order. San Francisco Bay RWQCB Order No. 01-094 provides direction for the remediation of the identified problems in Peyton Slough. The Order establishes requirements for a remedial design report and implementation schedule, documentation of the remediation of Peyton Slough, and five-year status report on the effectiveness of the implementation of the approved cleanup plan.
RWQCB Recommendation	List: Current application of other regulatory authorities and the effects-based nature of the listing would give this listing a low-priority.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program is addressing the problem.

Region 2: Peyton Slough

Silver, Cadmium, Copper, Selenium, Zinc, PCBs, Chlordane, ppDDE, Pyren +

The water quality problem is being addressed by implementation of the Consolidated Toxic Hot Spots Cleanup Plan using Cleanup and Abatement Orders.

Region 2: Pomponino Creek

High Coliform Count

Water Body	Pomponino Creek
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	High Coliform Counts are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan used.
Water Body-specific Information	Data = 5 months (2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 44 samples for total coliform, 23 samples for fecal coliform, 21 E. coli samples. Basin Plan objectives violated in 64% samples for total coliform median. Basin Plan objectives violated in 3% samples for fecal coliform geomean. Basin Plan Objectives violated in 17% samples for fecal coliform in dry-weather months. E. coli data showed Basin Plan objectives violated in 5% samples for all the beach uses in dry weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 6/12/00-10/31/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality objective used is applicable. 5. Data are numerical.

Region 2: Pomponino Creek

High Coliform Count

6. Standard methods were used.

7. Other water body- or site-specific information including the effects of season and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: San Gregorio Creek

High Coliform Count

Water Body	San Gregorio Creek
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	High Coliform Counts are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan used.
Water Body-specific Information	Data = 2 years (98-2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 56 samples for total coliform, 23 samples for fecal coliform, 22 samples for E. coli. Basin Plan objectives violated in 2% samples for total coliform maximum. Objectives violated in 73% samples for total coliform median. Basin Plan objectives violated in 26% samples for fecal coliform geometric mean. Objectives violated in 43% samples for fecal coliform in dry-weather months. E. coli data show 45% samples for total coliform maximum designated beach violated the Basin Plan Objectives. Basin Plan objectives violated in 45% samples for E. coli maximum moderately-used beach, violated in 18% samples for maximum lightly-used beach and violated in 45% samples for maximum infrequently-used beach, in dry weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 9/28/98-10/31/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Department, Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality.

Region 2: San Gregorio Creek

High Coliform Count

2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses apply to the water body.
4. Water quality objective used is applicable.
5. Data are numerical.
6. Standard methods were used.
8. Other water body- or site-specific information including the age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: San Leandro Bay

Mercury, Lead, Selenium, Zinc, PAHs, DDT, Pesticides

Water Body	San Leandro Bay
Stressor/Media/Beneficial Use	Mercury, Lead, Selenium, Zinc, PAHs, DDT, Pesticides/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP QA/QC. SFEI Study dated 2001 used appropriate QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity linked to aquatic life beneficial uses.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment chemistry used.
Water Body-specific Information	
Data used to assess water quality	Elevated sediment chemistry (ERM quotient), 5/6 tests, Significant amphipod toxicity 3/7 tests, Significant urchin toxicity 3/7 tests, no indication of significant degradation from benthic analyses.
Spatial representation	Spatial distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Temporal representation	Temporal distribution of samples is described in the report: Sediment quality and biological effects in San Francisco Bay (Bay Protection and Toxic Cleanup Program), dated August 1998.
Data type	Numerical data.
Use of standard method	BPTCP methods used.
Potential Source(s) of Pollutant	Not identified.
Alternative Enforceable Program	<p>This site was identified as a moderate priority in the Consolidated Toxic Hot Spots Cleanup Plan. Remediation planning has yet to be completed.</p> <p>A listing is not proposed for PCBs in San Leandro Bay because such a proposal is already subsumed in the more general listing for PCBs in Central San Francisco Bay. Consequently, it is not necessary to list San Leandro Bay for PCBs because the PCBs in sediment will be addressed in the development of the TMDL for PCBs in Central San Francisco Bay.</p>
RWQCB Recommendation	Monitoring List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. A listing is not proposed for PCBs in the sediments of San Leandro Bay because such a proposal is already subsumed in the more general listing for PCBs in Central San Francisco Bay.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality.

Region 2: San Leandro Bay

Mercury, Lead, Selenium, Zinc, PAHs, DDT, Pesticides

2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses are applicable and apply to this water body.
4. The evaluation guideline used to interpret narrative water quality standards is adequate.
5. Data are numerical.
6. Standard methods were used.

An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 2: San Pablo Reservoir

Mercury

Water Body	San Pablo Reservoir
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Used California Office of Health Hazard Assessment and Contra Costa County Health Services data. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to fish consumption.
Utility of measure for judging if standards or uses are not attained	Interim fish advisory issued Feb. 2000, USEPA screening criteria (0.3 ppm), WQO.
Water Body-specific Information	Data = 1 month (11/97), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	5 out of 12 composite fish-tissue samples exceed the USEPA criteria. All of the fish were trophic Level 4 samples (large mouth bass). There was also a fish advisory issued in February 2000.
Spatial representation	
Temporal representation	Data was collected during 11/97.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Atmospheric Deposition.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. Beneficial uses have been established. 4. Water quality standard used is applicable. 5. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the age of the data were considered.

Region 2: San Pablo Reservoir

Mercury

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: San Pedro Creek

High Coliform Count

Water Body	San Pedro Creek
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Dept. Beach Monitoring/Surfrider data/lab QA/QC used. USEPA Region IX Laboratory data used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	High Coliform Counts are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan used.
Water Body-specific Information	Data = 3 years (98-2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 99 samples for total coliform, 6 samples for fecal coliform, for Basin Plan data set. 41 samples for total coliform, 23 samples for fecal coliform for Ocean Plan data set. Basin Plan objectives violated in 13% samples for total coliform, 98% samples for total coliform median, and 100% violated for samples of fecal coliform geomean and fecal coliform in dry weather months. Ocean Plan objectives violated in 90% of the samples for total coliform, 96% of samples for fecal coliform geomean, and 100% fecal coliform in dry weather months. E. coli data show 67% samples for total coliform maximum designated beach violated the Basin Plan Objectives. Basin Plan objectives violated in 63% samples for E. coli maximum moderately-used beach, violated in 57% samples for maximum lightly-used beach and violated in 57% samples for maximum infrequently-used beach, in dry weather months.
Spatial representation	Data was collected at 15 sampling sites.
Temporal representation	Data was collected, from 5/26/98-8/14/00, and 4/24/00-11/13/00.
Data type	Numerical data.
Use of standard method	California Office of Health Hazard Assessment and Contra Costa County Health Services methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers, Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Region 2: San Pedro Creek

High Coliform Count

This conclusion is based on the staff findings that:

1. The data is considered to be of adequate quality.
2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses apply to the water body.
4. Water quality objective used is applicable.
5. Data are numerical.
6. Standard methods were used.
7. Other water body- or site-specific information including the age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: San Vicente Creek

High Coliform Count

Water Body	San Vicente Creek
Stressor/Media/Beneficial Use	High Coliform Count/Water/REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	San Mateo County Environmental Health Department. Beach Monitoring, Surfrider data/lab QA/QC used. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	High Coliform Counts linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO Basin Plan used.
Water Body-specific Information	Data = 2 years (98-2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 38 samples for total coliform, 22 samples for fecal coliform, and 6 samples for E. coli. E. coli data show 100% violations of the Basin Plan Objectives for total coliform maximum at all beaches in dry-weather months. Basin Plan violated in 3% of samples for total coliform maximum, 100% samples violated for total coliform median, 100% samples violated for fecal coliform geomean and 100% samples violated for fecal coliform (REC-1). Basin Plan objectives violated in 32% of samples for fecal coliform mean, and 23% violated samples for fecal coliform (REC-2) in dry-weather months.
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 10/6/98-9/26/00.
Data type	Numerical data.
Use of standard method	San Mateo County Environmental Health Dept. Beach Monitoring, Surfrider data/lab methods, RWQCB.
Potential Source(s) of Pollutant	Nonpoint Source.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body.

Region 2: San Vicente Creek

High Coliform Count

4. Water quality objective used is applicable.
5. Data are numerical.
6. Standard methods were used.
7. Other water body- or site-specific information including the age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 2: Stege Marsh

Arsenic, Copper, Mercury, Selenium, Zinc, Chlordane, Dieldrin, ppDDE, +

Water Body	Stege Marsh
Stressor/Media/Beneficial Use	Arsenic, Copper, Mercury, Selenium, Zinc, Chlordane, Dieldrin, ppDDE, Dacthal, Endosulfan 1, Endosulfan sulfate, Dichlorobenzophenone, Heptachlor epoxide, Hexachlorobenzene, Mirex, Oxidiazon, Toxaphene, PCBs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Used BPTCP QA/QC. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	The observed sediment toxicity and benthic community effects are linked to aquatic life beneficial uses.
Utility of measure for judging if standards or uses are not attained	Toxicity test results (and ERM quotient) for sediment used.
Water Body-specific Information	Data = 2 months (1997), Data measured at the site, Environmental Conditions considered at site.
Data used to assess water quality	Elevated sediment chemistry (ERM quotient) 0-1% amphipod Survival, 5/5 tests, significant urchin toxicity, 3/3 samples, Relative benthic index = 0.00 (2 benthic samples).
Spatial representation	Data was spatially collected.
Temporal representation	Data was collected from 10/97-12/97.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Industrial Point Sources.
Alternative Enforceable Program	Stege Marsh is identified as a toxic hot spot on the SWRCB Consolidated Toxic Hot Spots Cleanup Plan SWRCB Resolution No. 99-065). This plan is being implemented through Cleanup and Abatement Orders.
RWQCB Recommendation	List: Current application of other regulatory authorities and the effects-based nature of the listing would give this listing a low-priority.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program is addressing the problem.</p> <p>The water quality problem is being addressed by implementation of the Consolidated Toxic Hot Spots Cleanup Plan using Cleanup and Abatement Orders.</p>

Region 2: Tomales Bay

Mercury

Water Body	Tomales Bay
Stressor/Media/Beneficial Use	Mercury/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Aquatic life.
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	Data was spatially collected.
Temporal representation	Data was temporally collected.
Data type	Numerical data.
Use of standard method	N/A
Potential Source(s) of Pollutant	Mine Tailings.
Alternative Enforceable Program	N/A
RWQCB Recommendation	Change in listed water body. Change pollutant from Metals to Mercury.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body pollutant should be changed in this already listed water body. Change pollutant from Metals to Mercury.

Region 2: Walker Creek

Mercury

Water Body	Walker Creek
Stressor/Media/Beneficial Use	Mercury/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA/QC requirement. Data evaluation was based on USEPA guidelines for 305(b) reports, that uses a hierarchy of water quality data levels. Only data of higher overall level of information (Levels 3 and 4) were used to list a water body.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Aquatic life.
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	Data was spatially collected.
Temporal representation	Data was temporally collected.
Data type	Numerical data
Use of standard method	N/A
Potential Source(s) of Pollutant	Surface Mining, Mine Tailings
Alternative Enforceable Program	N/A
RWQCB Recommendation	Change in listed water body. Change pollutant from metals to mercury.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body pollutant should be changed in this already listed water body. Change pollutant from metals to mercury.

Page left blank intentionally.

Water Bodies Proposed for the Monitoring List in Region 2

Water Body	Pollutant/Stressor	Rationale
Carquinez Strait	Copper	Data = 466 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	Nickel	Data = 463 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Using the CTR standard, there have been no exceedances since March of 1993.
	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>For PBDEs: No available WQ objective or evaluation guideline. PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>
Lake Merced	Low Dissolved Oxygen	<p>5/14 (36%) Dissolved Oxygen violations at East Lake, 64% Dissolved Oxygen violations, South Police Range, 57% Dissolved Oxygen violations, South Pump Station, 93% Dissolved Oxygen violations, North Lake, 57% Dissolved Oxygen violations, East Lake, 5/14 (36%) violations of pH (>8.5) at North Lake.</p> <p>Because DO and pH are such dynamic parameters in this water body, the spatial and temporal coverage of this study is not adequate to assess impairment. RWQCB staff recommends that DO and pH be monitored systematically by a public agency such as the SFWD, the San Francisco Public Utilities Commission, or other stakeholder. This monitoring should be conducted at the same sites as the SFWD program plus additional sites within the different portions of the lake, and more frequently than before, continuously where resources allow, to assess whether the lake is truly impaired due to lack of DO or elevated pH. In the next listing cycle the RWQCB will re-evaluate DO and pH information, including the 1997-2000 data, and will make a determination for DO and pH listings.</p>

Water Body	Pollutant/Stressor	Rationale
Lake Merritt	Low Dissolved Oxygen	<p>In 1998, the USEPA listed Lake Merritt as impaired by low dissolved oxygen (D.O.) and organic enrichment. The original data used by USEPA to recommend listing does not meet quality and quantity requirements necessary to support 303(d) listing, specified in USEPA guidance. No assessment methodology for organic enrichment was followed, and the organic matter discharged to the lake would probably be better characterized as a source of potential D.O. impairment. Statewide the 303(d) list couples low D.O. with organic enrichment. Information submitted to the RWQCB during the public solicitation provided anecdotal-level information that D.O. levels may be inadequate to support beneficial uses, especially when the tide gates are closed by the Alameda County 303(d) Staff Report San Francisco Bay Regional Water Quality Control Board Flood Control District (ACFCD), but the study design did not document surface D.O. levels, particularly pre-dawn levels, which provide the necessary estimator of D.O. to support beneficial uses. No evidence of beneficial use impairment, such as number and frequency of fish kills, has been submitted. A quick review of 1997-98 surface D.O. data from the county indicates that the Basin Plan standard is met, but specific time-of-day information for this data is not available, and therefore this review is inconclusive.</p> <p>Because of community concern and anecdotal evidence of continued impairment, RWQCB staff does not recommend de-listing at this time, but recommends that D.O. be monitored systematically by a public agency such as the ACFCD, City of Oakland, Alameda County Public Works Agency, or other stakeholder. This monitoring should be conducted at a minimum at the same sites as studies submitted by the Lake Merritt Institute, but more frequently than before, continuously where resources allow, to assess whether the lake is truly impacted due to lack of D.O.</p>
Lakes and Shorelines of San Francisco Bay Region	Trash	<p>Volunteers have documented trash removal from the Lake Merritt but other lakes and shoreline conditions are unknown. More data and information are needed documenting in space and time the abundance and amount of trash and debris in lakes and along the shoreline.</p>
Novato Creek below Stafford Dam	Sedimentation and Siltation	<p>The two sediment reports have resulted from conditions of 401 certifications granted by the RWQCB for dredging permits in lower Novato Creek. Because there is a sediment management planning process underway required by regulatory action, RWQCB staff believes that the water quality standard may be implemented within the next listing 303(d) Staff Report San Francisco Bay Regional Water Quality Control Board cycle. Also, the sediment control plan recommends identifying areas of potential and existing salmonid spawning habitat and will better link the effects of sediment input from in-stream (the major source) and hillslope sources on beneficial uses. The RWQCB recommends that sediment threatens to impair water quality in Novato Creek. In the next listing cycle, the RWQCB will evaluate the planned sediment management and salmonid habitat identification efforts and an impairment listing will be determined. If the sediment control plan is not implemented, then the impairment listing may be triggered.</p>
Pacific Ocean at Baker Beach	High Coliform Count	<p>Data = 164 samples total. Ocean Plan objectives violated in 9.7% of the samples for total coliform in dry-weather months. Combined sewer overflow events are not considered because all CSOs in the vicinity have been directed away from Lobos Creek drainage onto Baker Beach.</p>
Pacific Ocean at San Gregorio Beach	High Coliform Count	<p>Data = 56 samples for total coliform, 23 samples for fecal coliform. Ocean Plan objectives violated in 5% of samples for total coliform in combined dry- and wet-weather months. Ocean Plan objectives violated in 8% samples for fecal coliform, wet-weather only. No exceedances between May and October. Listing driven by wet weather exceedances.</p>

Water Body	Pollutant/Stressor	Rationale
Pacific Ocean at Surfer's Beach	Total Coliform	Data = 134 total coliform samples, 126 fecal coliform samples. Ocean Plan objectives violated in 5% samples for total coliform in combined dry-weather and wet-weather months. Ocean Plan objectives violated in 9% of samples for fecal coliform in combined wet-dry weather. No exceedances between May and October. Listing driven by wet weather only.
Pilarcitos Creek below Pilarcitos Reservoir	Sedimentation and Siltation	Turbidity monitoring has not been conducted in Pilarcitos Creek so it is not possible, at this time, to determine whether a problem exists in Pilarcitos Creek. Pilarcitos Creek should be placed on the Monitoring List because: (1) there is a clear linkage between sediment and degradation of habitat for steelhead in this watershed; (2) it remains to be determined whether human activities are an important factor; and (3) there is an active watershed restoration program, the Pilarcitos Creek Watershed Advisory Committee (PCWAC), that has broad stakeholder participation and support. The sources of fine sediment are not adequately characterized to support a 303(d) listing at this time.
Redwood Creek, tidal portion (San Mateo County)	High Coliform Count	The data was from one year from one season with only 12 samples. The data showed 4 of 12 samples exceed the objective. The available data and information are inadequate to draw a conclusion. More monitoring is needed to determine if listing is necessary.
Richardson Bay	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos, For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>
Sacramento-San Joaquin Delta	Copper	Data = 466 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	Nickel	Data = 463 samples total collected for S.F. Bay segments North of the Dumbarton Bridge. Using the CTR standard, there have been no exceedances since March of 1993.

Water Body	Pollutant/Stressor	Rationale
San Francisco Bay, Central	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>
	Copper	Data = 466 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>
San Francisco Bay, Lower	Copper	Data = 466 samples total collected for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	Nickel	Data = 463 samples total collected for S.F. Bay segments North of the Dumbarton Bridge. Using the CTR standard, there have been no exceedances since March of 1993.
	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>

Water Body	Pollutant/Stressor	Rationale
San Francisco Bay, South		
	Copper	Data = 690 samples total collected for S.F. Bay south of the Dumbarton Bridge. Available ambient dissolved copper concentrations in the estuary never exceed the most conservative WER-based objectives. For example, out of 50 WERs recently generated based on USEPA guidance if the lowest 5th percentile WER of 1.7 were used, the CTR marine chronic objective for dissolved copper would be 5.3 ug/l, which has not been exceeded in 466 samples in the San Francisco Estuary since the Regional Monitoring Program began in 1993.
	Nickel	Data = 604 samples total collected for S.F. Bay south of the Dumbarton Bridge. Using the CTR standard, 1% (6) of the samples exceed it.
	PAHs, PBDEs	For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources. PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.
San Pablo Bay		
	Copper	Data = 466 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	Nickel	Data = 463 samples total collected for S.F. Bay segments North of the Dumbarton Bridge. Using the CTR standard, there have been no exceedances since March of 1993.
	PAHs, PBDEs	For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources. PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.
Suisun Bay		
	Copper	Data = 466 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Since March 1993, there have been 6 exceedances, and there have been no exceedances of the objective since 1997.
	Nickel	Data = 463 samples total collectively for S.F. Bay segments North of the Dumbarton Bridge. Using the CTR standard, there have been no exceedances since March of 1993.

Water Body	Pollutant/Stressor	Rationale
Urban Creeks of San Francisco Bay Region	PAHs, PBDEs	<p>For PAHs: Did not exceed threshold concentrations for adverse effects to fish embryos. For PBDEs: No available WQ criterion/objective. Occasional exceedances of the human health criteria in ambient samples, evidence of increasing shellfish concentrations, and preponderance of PAHs at toxic sites warrant increased assessment activities for PAHs by dischargers and cities around the region. RMP resources will be expected to better assess PAH impacts in the estuary, since the current spatial and temporal coverage does not address areas near the shoreline that may be greater impacted by PAHs in discharges of urban runoff and other sources.</p> <p>PBDEs research literature will be reviewed by the RWQCB to ascertain any new information on actual effects thresholds for these persistent bioaccumulative substances in the next listing cycle. These actions can be conducted regionally through the RMP, the Bay Area Pollution Prevention Group, or other association of dischargers. During the subsequent listing cycle, RWQCB staff evaluation of current research, applicable water quality criteria, and local actions to characterize sources and pollution prevention of PBDEs will determine whether a listing is needed.</p>
	Trash	<p>More data and information are needed documenting in space and time the abundance and amount of trash and debris in urban creeks of the San Francisco Bay Region.</p> <p>Guadalupe River: Thirty-four photographs were submitted depicting what appeared to be locations along the River. The trash included plastic bottles, styrofoam cups, paper wrappers, wood debris, and other unidentifiable debris.</p> <p>San Leandro Creek: Six photographs were submitted depicting what appeared to be locations along the Creek. The trash included accumulations of plastic bottles, styrofoam cups, paper wrappers, wood debris, shopping carts, aluminum cans, and other unidentifiable debris.</p> <p>Damon Slough: Six photographs were submitted depicting what appeared to be locations along the Slough. The trash included accumulations of plastic bottles, styrofoam cups, paper wrappers, wood debris, shopping carts, aluminum cans, and other unidentifiable debris.</p> <p>Glen Echo Creek: Two photographs were submitted depicting what appeared to be locations along the Creek. The trash included accumulations of plastic, styrofoam cups, paper wrappers, wood debris, shopping carts, and other unidentifiable debris.</p>

Reference List for Region 2

Staff Report

California Regional Water Quality Control Board. San Francisco Bay Region. 2001. Proposed Revisions to Section 303(d) List and Priorities for Development of Total Maximum Daily Loads (TMDLs) for the San Francisco Bay Region. Staff Report. November 14, 2001.

Technical References

Alameda Creek Watershed Key Point Monitoring for Alameda Creek, Alameda Creek Water Quality Monitoring Station, Alamo Canal, Arroyo de la Laguna, Arroyo del Valle, Arroyo las Positas, Arroyo Mocho, Sinbad, Stonybrook, and Vallecitos Creek. Jul. 1997-Apr. 2001. Alameda County Water District.

Alameda Creek Watershed Key Point Monitoring for Alamo Creek, South San Ramon Creek, and Tassajara Creek. May 1998-Apr. 2001. Alameda County Water District.

Anderson, J.W., Zeng, E.y., Jones, J.M., 1999. Environ. Toxicol. Chem. 1999, 18, 1506-1510.

Bay Area Clean Water Agencies (BACWA), 2001. Draft Report for Copper and Nickel North of the Dumbarton Bridge. Prepared by EOA, Inc. and Larry Walker Associates, December 6, 2001.

Bel Marin Keys Community Services District Water Quality Testing Results 1997-1998; 2000-2001 Novato Creek and Bel Marin Keys Lagoon, Novato, California.

Belsky, E. and S. Lattanzio. Feb 2001. Request for Assessment and Clean-Up at Pacheco pond. Waterkeepers Northern California.

BPTCP, 1998. Sediment Quality and Biological Effects in San Francisco Bay. Bay Protection and Toxic Cleanup Program. Final Technical Report. California State Water Resources Control Board, Division of Water Quality, San Francisco Bay Regional Water Quality Control Board, California Department of Fish and Game Marine Pollution Studies Laboratory, California State University Moss Landing Marine Laboratories, University of California, Santa Cruz, Institute of Marine Sciences. August 1998.

Cabral, B. Water Quality Project Manager. Watershed Sanitary Survey for the CA Water Service Company. Bear Gulch Water Treatment Facility. CA Water Service Company.

California Department of Pesticide Regulation, Surface Water Database. Sept. 24, 2000. Pesticide Action Network.

City of Benicia Monitoring Program for Lake Herman. Jul. 1997-Apr. 2001. City of Benicia.

Cloak D. and L.A.J. Buchan. Sept. 2000. Stormwater Environmental Indicators Demonstration Project Draft Report. Water Environment research Foundation.

Coastal Clean-up Data for Alameda and Contra Costa East Bay Regional Park District. 1998-2000. Kathleen Fusek. Alameda and Contra Costa East Bay Regional Park District

Coastal Clean-up Data for Marin County. 1997-2000. Christianne Gallagher. Marin Bay Model Visitor Center.

Coastal Clean-up Data for Sonoma County. 1997-2000. Christie Brown. Sonoma-Sierra.

Collins, L. Jul. 1998. Sediment Sources and Fluvial Geomorphic Processes of Lower Novato Creek Watershed.

Collins, L., D. Morton, and P. Amato. 2001. Carriger Creek Watershed Science Approach, San Francisco estuary Institute Draft.

Collins, L., P. Amato, and D. Morton. Dec. 2000. Application of the SFEI Watershed Science Approach to San Antonio Creek, Sonoma and Marin Counties, California.

Collins, L., P. Amato, and D. Morton. 2001. San Pedro Creek Geomorphic Analysis. San Mateo County.

Department of Water Resources. 1999. Assessment of MTBE in State Water Project Reservoirs. Apr.1999.

Draft Environmental Impact Report and Stream Maintenance Program Report for the Multi-Year Stream Maintenance Program. Mar. 28, 2001. Santa Clara County, Santa Clara Valley Water District.

Draft IR Site 2 Remedial Investigation Report Alameda Point Alameda, California. Dec 2000. Neptune and Company, Inc.

Draft Seaplane Lagoon Site Characterization Memorandum. April 2001. WaterKeepers of Northern California.

Eljarrat, E., J. Caixach and J. Rivera. 2001. Toxic Potency Assessment of Non- and Mono-*ortho* PCBs, PCDDs, PCDFs, and PAHs in Northwest Mediterranean Sediments (Catalonia, Spain). *Env. Sci. Tech.* 35:18 3589-3594.

Environmental Protection Agency Region IX Laboratory Data for San Pedro Creek. Jan. 1997-Nov. 2000. Environmental Protection Agency.

Fairfield-Suisun Water Treatment Plant Slough Data for Suisun Slough and Boynton Slough. Jun. 1997-Jun. 2000. NPDES Permit CA0038024. Fairfield-Suisun Sewer District.

Fairfield-Suisun Sewer District. 2001. Mercury Reduction Study-Final Report. July 10, 2001. NPDES Permit CA0038024.

Friends of Novato Creek Photo Journal. Friends of Novato Creek.

Friends of Sausal Creek Monitoring Program for Palo Seco, El Centro, and Hickory. Feb. 1998-Mar. 2000. Friends of Sausal Creek.

Grovhoug, T. R. and S. Salvia. Aug. 17, 2000. Work Plan for Copper and Nickel Impairment Assessment to Assist in Preparation of 2002 303(d) List-San Francisco Bay North of Dumbarton Bridge. Bay Area Clean Water Agencies (BACWA).

Haible, W.W., 1980. Holocene profile changes along a California coastal stream. *Earth Surface Processes* 5(3): 249-264.

Hecht, B., 1992. Sediment overview report: development of an initial sediment management plan for Lagunitas Creek, Marin County, California> Prepared for Marin Municipal Water District by Balance Hydrologics, Inc., February 1992.

Kannan, K., Villeneuve, D., Yamashita, N., Imagawa, T., Hashimoto, S., Miyazaki, A., Giesy, J. 2000. *Environ. Sci. Tech.* 2000, 34, 3568-3573.

Khim, J.S.; Villeneuve, D.L., Kannan, K., Koh, C., Giesy, G. 1999. *Environ. Sci. Tech.* 1999, 33, 4206-4211.

Lake Merritt Institute Monitoring Program. Sept. 1998-May 1999. Lake Merritt Institute, Alameda County.

Lawrence Livermore National Laboratory Storm Water Monitoring Program for Arroyo Seco and Arroyo Los Positas. Nov. 1997-Mar. 2000. Lawrence Livermore National Laboratory.

Leidy, Robert, 1997. Distribution and ecology of stream fishes in the San Francisco Bay drainage. *Hilgardia* 52, no. 8:1-175.

Marin County Macroinvertebrate Survey Fall 1999-Spring 2000. Sustainable Land Stewardship Institute for the Marin County Stormwater Pollution Prevention Program.

Marin County Stormwater Pollution Prevention Program's Aquatic Macroinvertebrate Sampling Program. World Wide Web. <http://www.mywatershed.org/bmi/samplesites.htm>. Apr. 2001.

Marin-Sonoma Counties Agricultural Runoff Influence Investigation 1999-2000 Summary. Dec 2000. Department of Fish and Game.

McMurtry, R. Jan. 2001. PCBs and Clams in Creeks The Results of An Environmental Partnership. Silicon Valley Toxics Coalition, Clean Streams/Clean Bay Project.

Moore, C.J. et al. 1999. Marine Debris in the North Pacific Gyre, with a Biomass Comparison of Neustonic Plastic and Plankton. (in preparation).

Moore, S.L. and M.J. Allen. 2000. Distribution of Anthropogenic and Natural Debris on the Mainland Shelf of the Southern California Bight. *Marine Pollution Bulletin* 40:83-88.

National Research Council (NRC), 2001. Assessing the TMDL Approach to Water Quality Management. Committee to Assess the Scientific Basis of the Total Maximum Daily Load Approach to Water Pollution Reduction. Water Science and Technology Board. Division of Earth and Life Studies. Governing Board of the National Research Council, with members of the National Academy of Sciences, National Academy of Engineering, and the Institute of Medicine.

Natural Resources Defense Council (NRDC), 2001. Testing the Waters XI: A Guide to Water Quality at Vacation Beaches. August 2001.

North Bay Dischargers Group, Bay Area Dischargers Association, Western States Petroleum Association. 2001. Copper and Nickel Impairment Assessment to Assist in Preparation of 2002 303(d) List, San Francisco Bay North of Dumbarton Bridge. May 15, 2001.

Pereira, W. E., F. D. Hostettler, S. N. Luoma, Alexander van Geen, C. C. Fuller, and R. J. Anima. 1999. Sedimentary record of anthropogenic and biogenic polycyclic aromatic hydrocarbons in San Francisco Bay, California. *Marine Chemistry*. 64:99-113.

Petaluma Tree Planters, 1999. Diazinon and Chlorpyrifos in the Upper Petaluma River Watershed Petaluma, California. B. Abelli-Amen, BASELINE Environmental Consulting.

Phillip Williams & Associates, Ltd. 1996. Pilarcitos Creek Restoration Plan. Aug. 1996.

Prunuske Chatham, Inc., 2001. Novato Creek Watershed Erosion Inventory and Sediment Control Plan. Prepared for Marin County Department of Public Works, April 2001.

Randall, Paul. 2001. Response to Recommendation by WaterKeepers of Northern California that San Pedro Creek be added to the 303(d) List for Total Coliform, Fecal Coliform, and Sedimentation. Memorandum to Bob Davidson, San Mateo STOPPP. June 27, 2001.

Rich, A. May. 1995. Feasibility Study to Rehabilitate the Fishery Resources of the Arroyo Corte Madera del Presidio Watershed, Mill Valley, California. A.A Rich and Associates Fisheries and Ecological Consultants.

Rich, A. Nov. 2000. Fishery Resources Conditions of the Corte Madera Creek Watershed, Marin County, California.

RWQCB, 1995. San Francisco Bay Water Quality Control Plan (Basin Plan).

RWQCB, 1999. Final Regional Toxic Hot Spot Cleanup Plan. March 1999.

San Francisco Public Utilities Commission Quarterly Lake Monitoring. Sept. 1997-Dec. 2000. Friends of Lake Merced, San Francisco Public Utilities Commission.

San Jose Copper and Nickel Monitoring Program. Feb. 1997-Dec. 2000.

Sanitary Survey Update Report 2001, Vol. 1,2. Municipal Water Quality Investigations Program. California State Water Project Watershed. Division of Planning and Local Assistance, CA Department of Water Resources.

San Mateo County Environmental Health Data for Marina Lagoon. Oct. 1998-Oct. 2000. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for North Coast: Fitzgerald Marine Reserve, Linda Mar Beach #5, Linda Mar Beach #6, Pillar Point Harbor, Sharp Park Beach #3, and Sharp Park Beach #6. Jan. 1998-Jan. 2001. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for North Coast: Montara Beach. Feb. 2000-Jan. 2000. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for North Coast: Pillar Point #4, #5, and #7. Jan. 2000-Jan. 2001. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for North Coast: Rockaway Beach. Mar. 2000-Jan. 2001. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for North Coast: Surfer's Beach. Jan. 1998-Jan. 2001. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for San Pedro. May. 1998-Aug. 2000. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for San Vicente. Oct. 1998-Sept. 2000. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for South Coast: Francis Beach, Pescadero Beach, Pomponio Beach, Pomponio Creek, San Gregorio Beach, and San Gregorio Creek. Sept. 1998-Mar. 2001. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for South Coast: Pescadero Creek. Sept. 2000-Oct. 2000. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for South Coast: Roosevelt Beach. Sept. 1998-Mar. 2001. WaterKeepers of Northern California.

San Mateo County Environmental Health Data for South Coast: Venice Beach. Sept.1999-Mar. 2001. WaterKeepers of Northern California.

Santa Clara Basin Watershed Management Initiative TMDL Work Group, 2000. Impairment Assessment Report for Copper and Nickel in Lower South San Francisco Bay. June 2000.

Santa Clara Basin Watershed Management Initiative TMDL Work Group, 1999. Conceptual Model Report for Copper and Nickel in Lower South San Francisco Bay, December 1999.

Santa Clara Watershed Monitoring for Almaden Reservoir. Jan.1998-Feb.2000. Santa Clara Valley Water District.

Santa Clara Watershed Monitoring for Anderson EROP Packwood, EROP North, EROP South, and EROP Holiday Estates. Jul.1997-Dec.2000. Santa Clara Valley Water District.

Santa Clara Watershed Monitoring for Anderson Reservoir. Jan.1998-Feb.2000. Santa Clara Valley Water District.

Santa Clara Watershed Monitoring for Anderson Reservoir Basin. Feb.1998-Jun.2000. Santa Clara Valley Water District.

Santa Clara Watershed Monitoring for Calero EROP Beach, EROP Cherry Cove, and EROP Portal. Jul.1997-Aug.2000. Santa Clara Valley Water District.

Santa Clara Watershed Monitoring for Calero Horse Ranch and Calero Inlet. Jul.1997-Aug. 2000. Santa Clara Valley Water District.

Santa Clara Watershed Monitoring for Calero Reservoir Basin. Feb.1998-May.2000. Santa Clara Valley Water District.

Santa Clara Watershed Monitoring for Coyote Reservoir. Jan.1998-Feb.2000. Santa Clara Valley Water District.

Santa Clara Watershed Monitoring for Horse Ranch Monitoring Program and Lightfoot Stable Monitoring Program. Jan.1998-Jan.2000. Santa Clara Valley Water District.

Santa Clara Watershed Monitoring for Hydrolab Anderson. Jul.1997-Jun.2001. Santa Clara Valley Water District.

Santa Clara Watershed Monitoring for Hydrolab Calero. Jan.2000-Dec.2000. Santa Clara Valley Water District.

Santa Clara Watershed Monitoring for Twin Creeks Monitoring Program. Jul.1997-Oct.2000. Santa Clara Valley Water District.

Scanlin, J. and A. Y. Feng. Oct. 20, 1997. Characterization of the Presence and Sources of Diazinon in the Castro Valley Creek Watershed. Alameda County.

San Francisco Estuary Institute. 2000. Sediment Contamination in San Leandro Bay, CA. Dec. 2000.

San Francisco Estuary Institute, 2001. Letter and attached information from Rainer Hoenicke to Thomas Mumley re: 303(d) List, May 15, 2001.

She, J., Petreas, M., Winkler, J., Visita, P., McKinney, M., and D. Kopec. 2001. PBDEs in the San Francisco Bay Area: Measurements in Harbor Seal Blubber and Human Breast Adipose Tissue. Chemosphere, In Press, 2001.

Smeltzer, M., J. Reilly, and D. Dawdy. Dec. 2000. Geomorphic Assessment of the Corte Madera Creek Watershed Marin County, California Final Report. Stetson Engineers Inc.

Southern Sonoma County Resource Conservation District, 1999. Petaluma River Enhancement Plan.

Spies, R. B., and D. W. Rice, Jr. 1988. Effects of organic contaminants on reproduction of the starry flounder *Platichthys stellatus* in San Francisco Bay [California, USA]: II. Reproductive success of fish captured in San Francisco Bay and spawned in the laboratory. Marine Biology (Berlin). 98:191-200.

Sykes, R.G. 2000. East Bay Watershed Sanitary Survey. East Bay Municipal Utility District.

Stafford Lake Watershed Sanitary Survey. 1995. North Marin Water District.

Thompson, B., B. Anderson, J. Junt, K. Taberski, and B. Phillips. 1999. Relationships between sediment contamination and toxicity in San Francisco Bay. Marine Environmental Research. 48:285-309.

U.S. Environmental Protection Agency, 1992. Plastic Pellets in the Aquatic Environment: Sources and Recommendations.

U.S. Environmental Protection Agency, 1996. Guidelines for Preparation of the 1996 State Water Quality Assessments (305(b) Reports).

U.S. Environmental Protection Agency. 2000. Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; (40 CFR Part 131); Part II. In: Federal Register, May 18, 2000. (California Toxics Rule). U.S. EPA. Washington, D.C.

U.S. Environmental Protection Agency, 2001a. DRAFT Consolidated Assessment and Listing Methodology (CALM), Toward a Compendium of Best Practices. April 20, 2001.

U.S. Environmental Protection Agency, 2001b. Draft Assessing and Monitoring Floatable Debris.

U.S. Geological Survey Water Quality Monitoring for Abbotts Lagoon Lower, Middle and Upper. Nov.1998-Aug.1999. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Alameda Creek. Feb.2000-May.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Arroyo de la Laguna. Dec.1997-Mar.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Arroyo Valle. Jan.1999-Mar.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Cull Creek and San Lorenzo Creek. Nov. 1997-May.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Crow Creek. Oct.1999-May.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Lagunitas Creek, Olema Creek, Pine Creek, and Redwood Creek (Alameda County). Nov.1998-Jan.2001. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Lobos Creek. Jul.1997-May.1998. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Redwood Creek (Marin County). Sept. 1997-Mar.1998. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for San Antonio Creek. Jan.2000-Apr.2000. U.S. Geological Survey.

U.S. Geological Survey Water Quality Monitoring for Torogas Creek. Jan.2000-May.000. U.S. Geological Survey.

Watershed Sanitary Survey. Jan.1996. Citizens Utilities Company of California Montara District.

Watershed Sanitary Survey 1997. Jan. 1997. Inverness Public Utility District, Marin County.

Watershed Sanitary Survey for Anderson, Coyote, Calero, Almaden 1989. Dec.1995. Santa Clara Valley Water District.

Watershed Sanitary Survey for Denniston and San Vicente Watersheds. Apr.1996. San Mateo County and Coast Side County Water District.

Watershed Sanitary Survey for Los Gatos and Saratoga Creek Watersheds. San Jose Water Company.

Watershed Sanitary Survey Update. Dec.2000. Citizens Water Resources Company Montara System.

Watershed Sanitary Survey Update 2000. Dec. 2000. Marin Municipal Water District, Kennedy Jenks Consultant.

Watershed Sanitary Survey Updates for the Alameda and Peninsula Watersheds. Dec.2000. Executive Summary. San Francisco Public Utilities Commission.

WaterKeepers of Northern California. Jan.-Apr. 2001. Photographs of trash in Guadalupe River, San Leandro Creek, Damon Slough, Lake Merritt and Glen Echo Creek.

WaterKeepers of Northern California. Mar. 1, 2001. Photographs of trash in Guadalupe River.

Other Information Considered

D'Alessio, C. and S. Guldman. May 1, 2001. Letter to Christine Kennelly at BayKeeper. Friends of Corte Madera Creek Watershed.

Dick, M. Jan. 15, 2001. Letter to Tom Mumley at San Francisco bay Regional Water Quality Control Board. Santa Clara Basin Watershed Management Initiative.

Johmann, L. May 12, 2001. Letter to Steve Moore in Response to Public Solicitation of Water Quality Information Notice. Western Waters Canoe Club.

Olivieri, A. W. May 11, 2001. Letter to Loretta Barsamian in Response to Solicitation of Water Quality Information. Santa Clara Valley Urban Runoff Pollution Prevention Program.

Salzman, B. May 14, 2001. Letter to Loretta Barsamian in Response to Solicitation of Water Quality Information. Marin Audubon Society.

Regional Water Quality Control Board

CENTRAL COAST REGION (3)



SECTION 303 (d) LIST PROPOSALS

Page left blank intentionally.

Region 3: Alamo Creek

Fecal Coliform

Water Body	Alamo Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Water Quality Objective are applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	14 bacterial samples, 8 samples exceeding (57%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods .
Potential Source(s) of Pollutant	Natural sources, Agriculture, Range Land.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited adequate spatial and sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Alisal Creek (Salinas)

Nitrate

Water Body	Alisal Creek (Salinas)
Stressor/Media/Beneficial Use	Nitrate/Water/Drinking Water
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	Exceedences of Basin Plan Water quality objectives in place for the protection of Municipal Drinking Water is applicable.
Water Body-specific Information	Samples taken from 7/28/99 - 2/10/00.
Data used to assess water quality	6 samples with 5 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient temporal coverage.3. Beneficial uses apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Alisal Creek (Salinas)

Dissolved Oxygen

Water Body	Alisal Creek (Salinas)
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Water quality objective is applicable to Aquatic Life.
Water Body-specific Information	Samples taken from 7/28/1999 to 2/10/2000 over 6 sampling dates.
Data used to assess water quality	Dissolved Oxygen; 6 samples with 1 exceedence.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Alisal Creek (Salinas)

Fecal Coliform

Water Body	Alisal Creek (Salinas)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Water Quality Objective are applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	6 bacteria samples, 5 samples exceeding (83%) WQO.
Spatial representation	1 site.
Temporal representation	Summer, fall, winter sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) QA/QC methods.
Potential Source(s) of Pollutant	Urban Runoff, Natural Sources, Nonpoint sources, Agriculture
Alternative Enforceable Program	N/A
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information considered includes age of the data. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Arroyo Seco River

Dissolved Oxygen

Water Body	Arroyo Seco River
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQOs are linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Dissolved Oxygen WQO is applicable to Aquatic Life.
Water Body-specific Information	Samples taken from 2/1/99 to 4/24/2000 over 17 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 20 samples with 3 exceedences.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standards. The staff confidence that standards were not exceeded moderate.</p>

Region 3: Arroyo Seco River

Fecal Coliform

Water Body	Arroyo Seco River
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO exceedences are applicable.
Water Body-specific Information	Samples taken from 2/99-4/00; 10 sampling dates (some sampling dates have multiple samples).
Data used to assess water quality	18 samples, 3 exceeding WQO.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Atascadero Creek (San Luis Obispo County)

Dissolved Oxygen

Water Body	Atascadero Creek (San Luis Obispo County)
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Samples taken from 4/7/99 to 5/15/2000 over 18 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 21 samples with 14 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Atascadero Creek (San Luis Obispo County)

Fecal Coliform

Water Body	Atascadero Creek (San Luis Obispo County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Samples taken from 4/99-5/00; 16 sampling dates (some sampling dates have multiple samples).
Data used to assess water quality	22 samples, 8 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Bean Creek Sedimentation-Siltation

Water Body	Bean Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data 1-3 years old, samples collected from site, one time sample event.
Data used to assess water quality	Riffle/Run Embeddedness = 50% samples exceed at site 14a, 60% samples exceed at site 14b, 52% samples exceed at Site B-1, 50% samples exceeded at Site B-2, 60% samples exceeded at Site B-3 and 49% samples exceeded at B-4. For Fine Sediment in Riffles 45% exceeded at Site 14a, 42% samples exceeded at Site B-2 and 55% samples exceeded at Site B-3. For D50: 37mm (minimum for a reach) 24mm for site B-1, 25mm for site B-2 and 6mm for Site B-3. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, residential use, roads, quarry.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used.

Region 3: Bean Creek Sedimentation-Siltation

8. Other water body- information including riffle/run embeddedness and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how interpret riffle/run embeddedness.

Region 3: Bear Creek (Santa Cruz County)

Sedimentation-Siltation

Water Body	Bear Creek (Santa Cruz County)
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data 1-3 years old, Samples collected from site, one time sample event.
Data used to assess water quality	Riffle/Run Embeddedness = 40% samples exceed at Site 17a, 37.5% samples exceed at Site 17b and 45% samples exceed at Site 17c. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, residential use, recreation and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water</p>

Region 3: Bear Creek (Santa Cruz County)

Sedimentation-Siltation

quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how interpret riffle/run embeddedness.

Region 3: Blosser Channel

Fecal Coliform

Water Body	Blosser Channel
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	10 Bacteria samples, 5 samples exceeding (50%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events, excluding the dry season.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP).
Potential Source(s) of Pollutant	Agriculture, Pasture Lands, Urban Runoff, Storm water, Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Blosser Channel

Dissolved Oxygen

Water Body	Blosser Channel
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Samples taken from 5/3/2000 to 2/28/2001 over 12 sampling dates.
Data used to assess water quality	Dissolved Oxygen; 14 samples with 2 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Boulder Creek Sedimentation-Siltation

Water Body	Boulder Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data 1-3 years old, Samples collected from site, one time sample event.
Data used to assess water quality	Riffle/Run Embeddedness = 40% samples exceed at site 17a, and 37.5% samples exceed at site 18b. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, residential use, vineyards and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered.

Region 3: Boulder Creek

Sedimentation-Siltation

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Bradley Canyon Creek

Dissolved Oxygen

Water Body	Bradley Canyon Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Low oxygen levels linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Exceedences of Basin Plan water quality objective in place for the protection of aquatic life is applicable.
Water Body-specific Information	Samples taken from 1/12/2000 to 1/29/2001 over 19 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 9 samples with 2 exceedences.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Bradley Canyon Creek

Fecal coliform

Water Body	Bradley Canyon Creek
Stressor/Media/Beneficial Use	Fecal coliform/water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	25 Bacteria samples, 15 samples exceeding (60% WQO violations).
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events, excluding the dry season.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Pasture Lands , Urban Runoff, Storm water, Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>Adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Bradley Canyon Creek

Nitrate

Water Body	Bradley Canyon Creek
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to MUN.
Water Body-specific Information	Samples taken from 3/12/00 to 12/07/00. There were 8 sampling dates.
Data used to assess water quality	8 samples, 4 samples exceeding. Impacts on dissolved oxygen were not observed and it is likely that the nitrate concentrations are not impacting beneficial uses.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if the applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited insufficient temporal coverage. 2. Data are numerical. 3. Standard methods were used. 4. Other water body information including age of the data were considered. <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Bradley Channel

Fecal Coliform

Water Body	Bradley Channel
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to Rec-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Samples taken from 1/00-2/01; 14 sampling dates.
Data used to assess water quality	14 samples, 7 samples exceeding WQO.
Spatial representation	1 sample site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Bradley Channel

Dissolved Oxygen

Water Body	Bradley Channel
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Samples taken from 1/11/2000 to 2/28/2001; over 17 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 17 samples with 4 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Bradley Channel

Nitrate

Water Body	Bradley Channel
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN.
Water Body-specific Information	Samples taken from 1/11/00 to 2/28/01.
Data used to assess water quality	15 samples with 3 exceedences.
Spatial representation	1 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited insufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements collected. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Branciforte Creek

Sedimentation-Siltation

Water Body	Branciforte Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data = 3-4 years old (1998 and 1999), samples collected from site.
Data used to assess water quality	Riffle/Run Embeddedness = 60% samples exceed at Site 21a and 37.5% samples exceed at Site 21b. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Logging in upper watershed, improper/illegal.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water</p>

Region 3: Branciforte Creek

Sedimentation-Siltation

quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Carpinteria Creek Virus

Water Body	Carpinteria Creek
Stressor/Media/Beneficial Use	Virus/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	Virus with Bacteria WQO are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Virus detection methodology not conclusive enough to indicate a virus problem, 30% of the samples has positive results for presence of a virus. There are too few virus data points during the most sensitive period (typically winter for pathogens). These water bodies are already covered by the existing 303(d) list. Bacteria reductions recommended through TMDLs for these waters will also result in virus reductions.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	Approved methodologies were not used.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be included on the 303(d) list because the water body is on an existing list for bacteria and pathogens which will address viruses.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be inadequate quality. 2. The evaluation guideline used to interpret narrative water quality standards is inadequate. 3. Non-standard methods were used. 4. Other water body information considered is unknown. <p>It is unknown whether any of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Cholame Creek

Fecal Coliform

Water Body	Cholame Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	10 bacterial samples, 8 samples exceeding (80%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events, excluding the dry season.
Data type	Numerical.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture lands, nonpoint sources, natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information considered includes age of the data. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Cholame Creek

Dissolved Oxygen

Water Body	Cholame Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to COLD and WARM beneficial use protection.
Water Body-specific Information	Data: 2-3 years old (2/2/99 to 2/8/2000); over 10 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 13 samples with 2 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Cholame Creek

Boron

Water Body	Cholame Creek
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agricultural Water Supply.
Water Body-specific Information	Samples taken from 5/99-2/00; 6 sampling dates.
Data used to assess water quality	7 samples, 7 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Chorro Creek

Fecal Coliform

Water Body	Chorro Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data: 3-9 years old (6/93 to 5/99).
Data used to assess water quality	869 samples, 193 samples exceeding WQO.
Spatial representation	6 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Chorro Creek

Metals

Water Body	Chorro Creek
Stressor/Media/Beneficial Use	Metals/Sediment/Aquatic Life (Habitat Uses)
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/Q.
Linkage between measurement endpoint and beneficial use or standard	Metal WQOs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Recently collected data show that standards appear to be met. The original assessment was based on two sample locations outside of Chorro Creek.
Water Body-specific Information	The data originally used to support this listing decision was not collected in the water body.
Data used to assess water quality	New data was not presented.
Spatial representation	Data not collected in Chorro Creek and does not represent conditions in the creek.
Temporal representation	Unknown
Data type	N/A
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	Siltation TMDL is expected to reduce metal loads.
RWQCB Recommendation	Delist because data was obtain from outside the waterbody.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because data used in listing is insufficient. Data were not collected in Chorro Creek and do not represent the conditions in the creek.

Region 3: Chumash Creek

Dissolved Oxygen

Water Body	Chumash Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Exceedances of Basin Plan water quality objective in place for the protection of aquatic life.
Water Body-specific Information	Samples taken from 6/8/93 to 5/10/99 with over 62 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 230 samples with 35 exceedances. Nutrients are not considered to be a problem in this water body. Only four samples of 198 measurements exceeded the water quality objective for nitrate.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list for dissolved oxygen because the applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the</p>

Region 3: Chumash Creek

Dissolved Oxygen

water quality standards for dissolved oxygen. The staff confidence that standards were exceeded is high.

Region 3: Chumash Creek

Fecal Coliform

Water Body	Chumash Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data: 3-9 years old (6/93-5/99).
Data used to assess water quality	246 samples, 70 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Corralitos Creek

Fecal Coliform

Water Body	Corralitos Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data: 4-5 years old (Samples taken from 12/97 to 12/98).
Data used to assess water quality	13 samples, 4 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Corralitos Creek

Dissolved Oxygen

Water Body	Corralitos Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQOs is applicable to Aquatic Life.
Water Body-specific Information	Data: 3-5 years old (Samples were taken from 8/18/1997 to 12/16/1998; over 15 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 16 samples with 4 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Cuyama River

Boron

Water Body	Cuyama River
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Boron is linked to Basin Plan Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Agricultural Water Supply.
Water Body-specific Information	Data: 2 year old (Samples taken from 4/00 to 12/00; 5 sampling dates).
Data used to assess water quality	43 samples, 3 samples exceeding WQO.
Spatial representation	4 sample sites.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Dairy Creek

Fecal Coliform

Water Body	Dairy Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data: 3-9 years old (Samples taken from 6/93 to 5/99).
Data used to assess water quality	635 samples, 156 samples exceeding WQO.
Spatial representation	3 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Dairy Creek

Dissolved Oxygen

Water Body	Dairy Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/Q.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to COLD and WARM beneficial uses.
Water Body-specific Information	Data: 3-7 years old (Samples taken from 6/8/1993 to 5/10/1999 over 291 sampling dates).
Data used to assess water quality	Dissolved Oxygen; 602 samples with 110 exceedences.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is exceeded and it is probable that a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were exceeded is high.</p>

Region 3: Elkhorn Slough

Dissolved Oxygen

Water Body	Elkhorn Slough
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data: 2-3 years old (Samples taken from 3/1/1999 to 3/7/2000; over 14 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 15 samples with 4 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Fall Creek Sedimentation-Siltation

Water Body	Fall Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data = 1-2 years old (1998 and 1999), samples collected from site.
Data used to assess water quality	Riffle/Run Embeddedness = 47.5% samples exceed at Site 15. For Fine Sediment in Riffles = 40% samples exceed at Site 15 (Sample size unknown in all cases). Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Trail system in Fall State Park (stream mile 1 and above), bank erosion/slumping, Residential use, road, trails.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water</p>

Region 3: Fall Creek Sedimentation-Siltation

quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Gabilan Creek

Fecal Coliform

Water Body	Gabilan Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	6 bacteria samples, 6 samples exceeding (100%) WQO.
Spatial representation	1 site
Temporal representation	Spring and winter sampling events during 1999 - 2000.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Urban Runoff, Natural Sources, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Kings Creek Sedimentation-Siltation

Water Body	Kings Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data = 2 years (1998 and 1999), samples were collected from site.
Data used to assess water quality	Riffle/Run Embeddedness = 52.5% sample exceed at site 19b. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, residential use, roads and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered.

Region 3: Kings Creek Sedimentation-Siltation

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: La Brea Creek

Fecal Coliform

Water Body	La Brea Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data: 1-2 years old (samples taken from 1/12/00 to 2/28/01).
Data used to assess water quality	143 samples, 3 samples exceeding WQO.
Spatial representation	1 sampling site
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methodology.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: LaBrea Creek

Dissolved Oxygen

Water Body	LaBrea Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is linked to Aquatic Life.
Water Body-specific Information	Data: 1-2 years old (samples taken from 1/12/2000 to 2/28/2001; over 18 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 19 samples with 3 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methodology.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Llagas Creek

TDS

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	TDS/Water/Aquatic Life and Agriculture
Data quality assessment. Extent to which data quality requirements met.	South County Regional Wastewater Authority (SCRWA) QA/QC
Linkage between measurement endpoint and beneficial use or standard	TDS WQO is linked to Aquatic Life and Agriculture.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Aquatic Life and Agriculture.
Water Body-specific Information	Data age = 2-4 years old.
Data used to assess water quality	90 water samples, 90 sample exceeding (100%) WQO.
Spatial representation	4 Stations.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	South County Regional Wastewater Authority (SCRWA) methods.
Potential Source(s) of Pollutant	Nonpoint and point sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Llagas Creek

Sodium

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	Sodium/Water/Agriculture, Aquatic Life and Drinking Water
Data quality assessment. Extent to which data quality requirements met.	South County Regional Wastewater Authority (SCRWA) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Sodium is linked to Agriculture, Aquatic Life and Drinking Water.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture, Aquatic Life and Drinking Water.
Water Body-specific Information	Data age = 2-10 years old.
Data used to assess water quality	78 water samples, 60 sample exceeding (77%) WQO.
Spatial representation	4 Stations.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	South County Regional Wastewater Authority (SCRWA) methods.
Potential Source(s) of Pollutant	Nonpoint and unknown sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Llagas Creek

Dissolved Oxygen

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	South County Regional Wastewater Authority (SCRWA) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-4 years old. Samples taken between 12/18/97 and 1/7/99 over 30 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 90 samples with 16 exceeding the WQO.
Spatial representation	7 Stations.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	South County Regional Wastewater Authority (SCRWA) methods.
Potential Source(s) of Pollutant	Nonpoint and point source.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including season and age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Llagas Creek pH

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life and MUN
Data quality assessment. Extent to which data quality requirements met.	South County Regional Wastewater Authority (SCRWA) QA/QC
Linkage between measurement endpoint and beneficial use or standard	pH WQO is linked to Aquatic Life and MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life and MUN.
Water Body-specific Information	Data age = 2-4 years old.
Data used to assess water quality	128 samples, 42 samples exceeding.
Spatial representation	4 stations.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	South County Regional Wastewater Authority (SCRWA) methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Llagas Creek

Fecal Coliform

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO applicable to REC-1.
Water Body-specific Information	Data age = 3-4 years old.
Data used to assess water quality	41 bacteria samples, 26 samples exceeding (63%) WQO.
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture lands, nonpoint sources, natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Llagas Creek Chloride

Water Body	Llagas Creek
Stressor/Media/Beneficial Use	Chloride/Water/Agriculture and Drinking Water
Data quality assessment. Extent to which data quality requirements met.	South County Regional Wastewater Authority (SCRWA) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Chloride WQO is linked to Agriculture and Drinking Water.
Utility of measure for judging if standards or uses are not attained	Site-specific WQO applicable to Agriculture and Drinking Water.
Water Body-specific Information	Data age = 2-10 years old.
Data used to assess water quality	78 water samples, 78 samples exceeding (100%) WQO.
Spatial representation	4 Stations.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	South County Regional Wastewater Authority (SCRWA) methodology.
Potential Source(s) of Pollutant	Nonpoint and point sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Los Osos Creek

Fecal Coliform

Water Body	Los Osos Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data age = 3-6 years old (samples taken from 3/96 to 5/99).
Data used to assess water quality	242 samples, 63 samples exceeding WQO.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Los Osos Creek

Priority organics

Water Body	Los Osos Creek
Stressor/Media/Beneficial Use	Priority organics/Water--Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Priority Organic WQO is linked to Aquatic life
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	The data are one year old. Samples were collected in the Spring and Summer of 2001. Two sampling events at most of the 5 sites for both water and sediment. The total number of samples collected during the 2 sampling events were 9 water and 8 sediment samples.
Data used to assess water quality	9 water sample/0 samples exceeding and 8 sediment samples/0 samples exceeding. The results indicate chemical in concentrations below NOAA and ERMs.
Spatial representation	Five sites.
Temporal representation	Two sampling events in 2001.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because new data points towards no impairment. Most current data indicates WQO per CTR and BP are met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded in sediment or water.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Los Osos Creek

Dissolved Oxygen

Water Body	Los Osos Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to aquatic life protection.
Water Body-specific Information	Data age = 3-7 years old. Samples taken from 1/26/94 to 5/10/99 with over 147 sampling dates.
Data used to assess water quality	251 water samples, 44 samples exceeding WQO.
Spatial representation	2 Stations.
Temporal representation	Sampled monthly during all seasons.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methodology.
Potential Source(s) of Pollutant	Agriculture, Urban Runoff, Pasture Lands, Unknown Sources.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Love Creek Sedimentation-Siltation

Water Body	Love Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect Aquatic Life.
Water Body-specific Information	Data = 2 years old (samples taken in 1998 and 1999), Samples collected from site.
Data used to assess water quality	Riffle/Run Embeddedness = 44% samples exceed at Site L-1. For D50: 37 = 30mm sample at Site Z-8. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, agriculture, residential use, roads and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water</p>

Region 3: Love Creek Sedimentation-Siltation

quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Main Street Canal

Nitrate

Water Body	Main Street Canal
Stressor/Media/Beneficial Use	Nitrate/Water/Drinking Water
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to Drinking Water.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Drinking Water.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	10 water samples, 6 samples exceeding (60%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Nonpoint Sources and Urban Runoff.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Majors Creek

Turbidity

Water Body	Majors Creek
Stressor/Media/Beneficial Use	Turbidity/Water/MUN and Aquatic life (WARM, COLD, SPWN)
Data quality assessment. Extent to which data quality requirements met.	City of Santa Cruz data, QAPP unknown.
Linkage between measurement endpoint and beneficial use or standard	Heavy sedimentation affects drinking water quality and habitat functions.
Utility of measure for judging if standards or uses are not attained	Narrative objective: Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.
Water Body-specific Information	<p>The City of Santa Cruz staff have stated this watershed is experiencing increasingly frequent periods of high turbidity associated with the heavy sedimentation attributed to natural background erosion sources, the large network of unmaintained seasonal roads, log jam related stream bank erosions, feral pig activity and other factors. In addition to drinking water quality and production challenges posed by these conditions, the channel itself (especially the East Branch) is choked with sediment, thereby limiting habitat functions.</p>
Data used to assess water quality	<p>The City describes high turbidity associated with heavy sedimentation due to erosion, seasonal roads, log jam-related erosion, feral pigs, and other factors. Photographs and some turbidity data were submitted.</p> <p>It is difficult to interpret the photographs submitted for sediment impairment. In addition, it is difficult to compare the turbidity information to measure impact, because turbidity measured used in samples (NTU) differ from the Basin Plan's turbidity units (JTU). There is not a conversion from NTUs to JTUs. The data cannot be compared to the water quality objective.</p> <p>In addition, written comments and recommendations of the Gray Whale Ranch Investors' Timber Harvest Plan (THP) in the Majors Creek Watershed from a certified Fisheries Scientist was submitted and reviewed. The document describes the effects of sedimentation on streambank erosion and degradation on condition of creek. The biologist recommends that independent, post-harvest monitoring should be conducted to verify that the THP has reduced erosion and stream sedimentation after logging. This report is a summary, narrative report noting the biologist's opinions of the watershed. No actual quantitative data are presented.</p>
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Both numerical and non-numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Natural sources, erosion, unmaintained roads, log jams, stream bank erosion, feral pig activity

Region 3: Majors Creek
Turbidity

Alternative Enforceable Program

RWQCB Recommendation

List.

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.

This conclusion is based on the staff findings that:

- 1. The data is considered to be of unknown quality. Turbidity measurements do not correspond to turbidity units used in the basin plan. Photographs submitted are difficult to quantify.
- 2. The data exhibited insufficient spatial and temporal coverage.

An inadequate amount of the water quality data and information exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.

Region 3: Monterey Bay at Aquarium

Dissolved Oxygen, temperature, total coliform, fecal coliform, enteroc +

Water Body	Monterey Bay at Aquarium
Stressor/Media/Beneficial Use	Dissolved Oxygen, temperature, total coliform, fecal coliform, enterococcus, total ammonia, nitrite, nitrate, phosphate, pH/Water/All Ocean-Bay Uses
Data quality assessment. Extent to which data quality requirements met.	Monterey Bay Aquarium QA/QC
Linkage between measurement endpoint and beneficial use or standard	Measurements related to all Ocean Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	Ocean Plan Objectives are applicable Ocean uses.
Water Body-specific Information	Data age =1 - 5 years old.
Data used to assess water quality	Number of samples unknown, question about quality of D.O. measurements after passing through pump and sump house.
Spatial representation	Only represents one point at 50 foot depth in all of Monterey Bay.
Temporal representation	D.O. data only covered one year; Only one summer (June-Aug 2000) of poor D.O. results; Other stressors sampled for five years.
Data type	Numerical Data; Dissolved Oxygen data judged to be insufficient for this listing cycle due to questions of temporal, spatial, and Dissolved Oxygen data quality
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list based on the inadequate spatial and temporal coverage.</p> <p>The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Moro Cojo Slough

Fecal Coliform

Water Body	Moro Cojo Slough
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 4/1999 to 2/2000).
Data used to assess water quality	7 samples, 1 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 3: Moro Cojo Slough

Dissolved Oxygen

Water Body	Moro Cojo Slough
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 3/1/1999 to 3/7/2000 over 13 sampling dates).
Data used to assess water quality	Dissolved Oxygen; 14 samples with 9 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Moss Landing Harbor

Dissolved Oxygen

Water Body	Moss Landing Harbor
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 3/1/1999 to 3/7/2000 over 14 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 15 samples with 0 exceedences.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that the standard was not exceeded is high.</p>

Region 3: Mountain Charlie Gulch

Sedimentation-Siltation

Water Body	Mountain Charlie Gulch
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect aquatic life.
Water Body-specific Information	Data age = 2 years old (1998 and 1999), Samples collected from site.
Data used to assess water quality	Riffle/Run embeddedness = 40% samples exceed at Site 16b, 35% samples exceed at Site 16c. For Fine Sediments in Riffles = 38% samples exceed at Site Z-3. For D50: 37mm (minimum for a reach) = 11mm at Site Z-3. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Residential use, timber, roads.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water</p>

Region 3: Mountain Charlie Gulch

Sedimentation-Siltation

quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Newell Creek (Upper)

Sedimentation-Siltation

Water Body	Newell Creek (Upper)
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect aquatic life.
Water Body-specific Information	Data = 2 years old (1998 and 1999), Samples collected from site.
Data used to assess water quality	Riffle/Run embeddedness = 40% samples exceed at Site 16b, 35% samples exceed at Site 16c. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999.
Spatial representation	Zig-Zag sample design, 10 samples.
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, agriculture, residential use, roads and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- information including riffle/run embeddedness and age of the data were considered.

Region 3: Newell Creek (Upper)

Sedimentation-Siltation

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Region 3: Nipomo Creek

Dissolved Oxygen

Water Body	Nipomo Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Exceedances of Basin Plan water quality objective in place for the protection of aquatic life.
Water Body-specific Information	Samples taken from 6/29/00 to 3/1/01 with over 18 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 31 samples with 4 exceedances.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list for dissolved oxygen because the applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standards for dissolved oxygen. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Nipomo Creek

Fecal Coliform

Water Body	Nipomo Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	25 bacteria samples, 18 exceeding samples (72%) WQO.
Spatial representation	2 sites.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Urban Runoff, Agriculture, Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>Adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Old Salinas River Estuary

Dissolved Oxygen

Water Body	Old Salinas River Estuary
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 3/1/1999 to 3/7/2000 over 14 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 28 samples with 11 exceedences.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that the standard was exceeded is moderate.</p>

Region 3: Old Salinas River Estuary

Fecal Coliform

Water Body	Old Salinas River Estuary
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 4/99 to 2/00).
Data used to assess water quality	19 samples, 6 samples exceeding WQO.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Orcutt Solomon Creek

Dissolved Oxygen

Water Body	Orcutt Solomon Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/Q.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 1-2 year old (samples taken from 1/12/2000 to 2/28/2001 over 18 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 42 samples with 2 exceedences.
Spatial representation	4 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that the standard was not exceeded is high.</p>

Region 3: Orcutt Solomon Creek

Fecal Coliform

Water Body	Orcutt Solomon Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	50 bacteria samples, 31 samples exceeding (62%) WQO
Spatial representation	3 sites
Temporal representation	Monthly sampling events
Data type	Numerical.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture lands, nonpoint sources, natural sources and Agriculture.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Orcutt Solomon Creek

Boron

Water Body	Orcutt Solomon Creek
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Agriculture Water Supply.
Water Body-specific Information	Data age = 2 years old (samples taken from 4/2000 to 12/2000).
Data used to assess water quality	34 samples, 5 samples exceeding WQO.
Spatial representation	3 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Orcutt Solomon Creek

Nitrate

Water Body	Orcutt Solomon Creek
Stressor/Media/Beneficial Use	Nitrate/Water/Drinking Water
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/12/00 to 2/28/01).
Data used to assess water quality	45 samples, 31 samples exceeding.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Oso Flaco Creek

Fecal Coliform

Water Body	Oso Flaco Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/2000 to 1/2001; 13 sampling dates).
Data used to assess water quality	14 samples, 6 samples exceeding WQO.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Oso Flaco Creek

Dissolved Oxygen

Water Body	Oso Flaco Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/12/2000 to 3/1/2001 over 19 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 15 samples, 0 samples exceeding.
Spatial representation	4 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Oso Flaco Creek

Nitrate

Water Body	Oso Flaco Creek
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/12/00 to 1/31/01).
Data used to assess water quality	15 samples with 15 samples exceeding.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Oso Flaco Lake

Nitrate

Water Body	Oso Flaco Lake
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to MUN.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	55 water samples, 55 samples exceeding (100%) WQO.
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Oso Flaco Lake

Dissolved Oxygen

Water Body	Oso Flaco Lake
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2 years old (samples taken from 9/7/2000 to 9/8/2000 over 2 sampling dates).
Data used to assess water quality	Dissolved Oxygen; 12 samples, 0 samples exceeding.
Spatial representation	6 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were not exceeded is high.</p>

Region 3: Pacheco Creek

Fecal Coliform

Water Body	Pacheco Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 12/1997 to 12/1998).
Data used to assess water quality	13 samples, 3 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacheco Creek

Dissolved Oxygen

Water Body	Pacheco Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 4-5 years old (samples taken from 12/18/1997 to 12/16/1998 over 15 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 16 samples, 3 samples exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean (various sites)

Total coliform, e. coli, enterococcus, nitrate, phosphate, sulfate, tu +

Water Body	Pacific Ocean (various sites)
Stressor/Media/Beneficial Use	Total coliform, E. coli, Enterococcus, nitrate, phosphate, sulfate, turbidity, Dissolved Oxygen, temperature, conductivity, pH/water/all ocean-bay uses
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara Channel Keeper, QA/QC is unknown
Linkage between measurement endpoint and beneficial use or standard	Measurements are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Unknown.
Water Body-specific Information	Unknown.
Data used to assess water quality	Data indicates suddenly elevated bacteria concentrations but standards are not exceeded. Data supplemented with data from Santa Barbara County Public Health Dept., leading to three beaches to be listed.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	Standard methods were not used.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of inadequate quality. 2. The data exhibited sufficient spatial and temporal coverage is unknown. <p>Uncertain whether water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Pacific Ocean at Arroyo Burro (Santa Barbara County)

Total Coliform

Water Body	Pacific Ocean at Arroyo Burro (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean standards are linked to the REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable.
Water Body-specific Information	Data age = 8/5/96-4/25/01.
Data used to assess water quality	Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 3/3-4/14/97; 1/12-3/2/98; 3/1-4/26/99. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 5/5-6/2/97; 12/29/97-1/27/98; 2/2-3/2/98; 3/2-30/98; 5/4-6/1/98; 7/6-29/98; 8/3-8/31/98; 1/25-1/27/99; 4/5-5/3/99; 5/10-6/1/99; 1/31-2/28/00.
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for total coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of water quality measurements exceeded the water quality standard for total coliform. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

Virus

Water Body	Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Virus/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	Virus indicators-Bacteria WQOs are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	These water bodies are already covered by the existing 303(d) list. Bacteria reductions recommended through TMDLs for these waters will also result in virus reductions.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Unknown
Data type	Data was not presented.
Use of standard method	An approved methodology was not used.
Potential Source(s) of Pollutant	Data was not presented.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be included on the 303(d) list because the water body is on an existing list for bacteria and pathogens which will address viruses.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be inadequate quality. 2. Data types are unknown. 3. Other water body information considered is unknown. <p>It is unknown whether any of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County + Fecal Coliform

Water Body	Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan WQO is applicable to REC-1. AB 411 standards are applicable.
Water Body-specific Information	Data age = 0-5 years old. Recent data collected between April 15, 2002 and December 2, 2002.
Data used to assess water quality	250 bacteria samples, 143 samples exceeding (57%) WQO. Recent data collected between April and December, 2002: 34 samples, 0% exceeding the AB 411 standards. A DNA study was conducted to determine the source of the previously high bacteria densities. The results of the study showed that avian sources accounted for 79% of the elevated bacteria, 52% was attributed to gulls alone. The balance of DNA was from wildlife (18%) and domestic (3%) sources. Bacteria densities on the beach have been reduced since the implementation of a bird management plan to deter gulls from using the surrounding areas.
Spatial representation	1 site.
Temporal representation	Monthly sampling events. Recent data collected between April and December, 2002: approximately weekly.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Pasture Lands, Agriculture, Nonpoint and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are currently not exceeded. This conclusion is based on the staff findings that: 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body.

Region 3: Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County + Fecal Coliform

4. Water quality standard used is applicable.
5. Data are numerical.
6. Standard methods were used.
7. Other water body information considered includes age of the data.

In recently collected data, none of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.

Region 3: Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County + Total Coliform

Water Body	Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/Ocean Plan Shellfish Harvest and REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Total coliform Ocean Plan standards are linked to Shellfish Harvest and REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan WQO are applicable to Ocean Plan Shellfish Harvest and REC-1.
Water Body-specific Information	Data age = 1-5 years old. Recent data collected between April 15, 2002 and December 2, 2002.
Data used to assess water quality	250 bacteria samples, 213 samples exceeding (85%) WQO. Recent data collected between April and December, 2002: 34 samples, 0% exceeding the AB 411 standards. A DNA study was conducted to determine the source of the previously high bacteria densities. The results of the study showed that avian sources accounted for 79% of the elevated bacteria, 52% was attributed to gulls alone. The balance of DNA was from wildlife (18%) and domestic (3%) sources. Bacteria densities on the beach have been reduced since the implementation of a bird management plan to deter gulls from using the surrounding areas.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Pasture Lands, Agriculture, Nonpoint and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This conclusion is based on the staff findings that: <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical.

Region 3: Pacific Ocean at Arroyo Quemado Beach (Santa Barbara County + Total Coliform)

6. Standard methods were used.

7. Other water body information considered includes age of the data.

In recently collected data, none of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.

Region 3: Pacific Ocean at Butterfly Beach (Santa Barbara County)

Total Coliform

Water Body	Pacific Ocean at Butterfly Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Used Santa Barbara County Environmental Health Dept. Data, QA/QC .
Linkage between measurement endpoint and beneficial use or standard	Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable. AB 411 standards are applicable.
Water Body-specific Information	Data age = 1-2 years old (1/3/00-4/23/01). Recent data collected between April 15, 2002 and December 2, 2002.
Data used to assess water quality	Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for: None. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 2/7-3/1/00; 2/5-3/6/01. Recent data collected between April and December, 2002: 34 samples, 0% exceeding the AB 411 standards. A DNA study was conducted to determine the source of the previously high bacteria densities. The results of the study showed that avian sources accounted for 79% of the elevated bacteria, 52% was attributed to gulls alone. The balance of DNA was from wildlife (18%) and domestic (3%) sources. Bacteria densities on the beach have been reduced since the implementation of a bird management plan to deter gulls from using the surrounding areas.
Spatial representation	1 site.
Temporal representation	Weekly sampling. Recent data collected between April and December, 2002: approximately weekly sampling.
Data type	Numerical data.
Use of standard method	Used Santa Barbara County Environmental Health Dept. Data methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. This conclusion is based on the staff findings that: 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been apply to the water body.

Region 3: Pacific Ocean at Butterfly Beach (Santa Barbara County)

Total Coliform

4. Water quality standard used is applicable.
5. Data are numerical.
6. Standard methods were used.
7. Other water body- or site-specific information including the age of the data were considered.

In recent sampling, none of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.

Region 3: Pacific Ocean at Capitola Beach (Santa Cruz County)

Fecal and Total Coliform

Water Body	Pacific Ocean at Capitola Beach (Santa Cruz County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/ REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. QA/QC .
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan Standards are linked to REC- 1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan Standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-3 years old (4/29/99 - 5/30/01).
Data used to assess water quality	Capitola Beach (0240): Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: 2/14-4/15/00. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for: 4/15-5/9/00; 1/8-2/5/01; 2/5-3/6/01.
Spatial representation	14 sites.
Temporal representation	For Capitola Beach; weekly sampling (with a few weeks missing). For remaining sites: Highly variable.
Data type	Numerical data.
Use of standard method	Santa Cruz County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Carpinteria City Beach (Santa Barbara Coun + Fecal and Total Coliform

Water Body	Pacific Ocean at Carpinteria City Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1..
Water Body-specific Information	Data age = 1-4 years old (6/22/98-4/23/01).
Data used to assess water quality	Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 1/2/01-2-26-01. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 1/3-1/31/00; 2/7-3/6/00; 1/2/01-1/29/01; 2/20-3/12/01.
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. Methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Carpinteria State Beach- Carpinteria Creek + Fecal and Total Coliform

Water Body	Pacific Ocean at Carpinteria State Beach- Carpinteria Creek Mouth (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. data, QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1 - 5 years old (3/10/97-4/23/01).
Data used to assess water quality	Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 12/1/97-1/27/98; 7/6-8/31/98; 9/8-11/2/98; 1/4/99-2/22/99; 1/16-2/26/01. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 12/1-12/29/97; 1/5-27/98; 2/9-3/9/98; 3/30-4/27/98; 5/26-6/22/98; 7/6-7/27/98; 8/3-31/98; 9/8-28/98; 11/2-11/30/98; 1/4-25/99; 3/15-4/14/99; 5/3-6/1/99; 2/17-3/6/00; 1/2-21/01; 2/5-3/6/01.
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Carpinteria State Beach- Carpinteria Creek + Fecal and Total Coliform

Many the water quality measurements exceeded the water quality standard.
The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at City College Beach (Leadbetter Beach)

Virus

Water Body	Pacific Ocean at City College Beach (Leadbetter Beach)
Stressor/Media/Beneficial Use	Virus/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	No QAPP
Linkage between measurement endpoint and beneficial use or standard	Virus with Bacteria WQOs are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	These water bodies are already covered by the existing 303(d) list. Bacteria and pathogen improvements recommended through TMDLs for these waters will also result in virus improvement.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	An approved method was not used.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be included on the 303(d) list because the water body is on an existing list for bacteria and pathogens.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The evaluation guideline used to interpret narrative water quality standards is inadequate. 2. Non-standard methods were used. 3. Other water body information considered is unknown. <p>It is unknown whether any of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Pacific Ocean at Cowell Beach (Santa Cruz County)

Fecal coliform

Water Body	Pacific Ocean at Cowell Beach (Santa Cruz County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. data, QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform WQOs are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-4 years old (10/2/98 - 5/30/01).
Data used to assess water quality	<p>Cowell @ Stairs (0494): Fecal Coliform Objective (Geometric mean exceed 200 per 100 ml in 30 days) exceeded for: 8/3-8/30/99; 9/7-10/5/99; Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: 4/14-6/13/00. Cowell Beach (0490): Fecal Coliform Objective (Geometric mean exceed 200 per 100 ml in 30 days) exceeded for: 8/30-9/27/99. Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: 4/17-6/13/00.</p> <p>For Cowell @ Stairs and Cowell Beach; weekly sampling (with a few weeks missing). For remaining sites: highly variable.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Cruz County Health Department.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Cowell Beach (Santa Cruz County)

Fecal coliform

A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.

Region 3: Pacific Ocean at East Beach (mouth of Mission Creek, Santa + Total Coliform

Water Body	Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/Ocean Plan Shellfish Harvest, REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Total Coliform linked to Shellfish Harvest and REC-1.
Utility of measure for judging if standards or uses are not attained	Assembly Bill 411 Beach Posting is applicable to Shellfish Harvest and REC-1.
Water Body-specific Information	Data age = 1- 6 years.
Data used to assess water quality	262 bacteria samples, 181 samples exceeding (69%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Urban Runoff, Non point sources, Unknown sources, Agriculture.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Pacific Ocean at East Beach (mouth of Mission Creek, Santa + Fecal Coliform

Water Body	Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/Ocean Plan REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standard is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Assembly Bill Beach 411 Posting is applicable to REC-1.
Water Body-specific Information	Data age = 1-6 years old.
Data used to assess water quality	262 bacteria samples, 160 samples exceeding (61%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Urban Runoff, Agriculture, Natural Source, Non point sources and unknown sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Pacific Ocean at East Beach (mouth of Mission Creek, Santa + Virus

Water Body	Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)
Stressor/Media/Beneficial Use	Virus/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	QAPP was not used.
Linkage between measurement endpoint and beneficial use or standard	Virus correlated to bacteria indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	These water bodies are already covered by the existing 303(d) list. Bacteria and pathogen improvements recommended through TMDLs for these waters will also result in virus improvement.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	An approved methodology was not used.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be included on the 303(d) list because the water body is on an existing list for bacteria and pathogens.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of inadequate quality. 2. The evaluation guideline used to interpret narrative water quality standards is inadequate. 3. Non-standard methods were used. 4. Other water body information considered is unknown. <p>It is unknown whether any of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa + Total Coliform

Water Body	Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (4/7/97 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 1/5-3/2/98; 5/4-6/29/98; 3/1-4/26/99.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 12/1-29/97; 1/5-27/98; 2/2-3/2/98; 3/9-4/6/98; 4/13-5/11/98; 6/1-29/98; 8/3-31/98; 10/12-11/9/98; 3/15-4/12/99; 2/2-3/1/00; 2/5-26/01; 3/6-26/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for total coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of water quality measurements exceeded the water</p>

Region 3: Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa + Total Coliform

quality standard for total coliform. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at El Capitan Beach (Santa Barbara County)

Fecal and Total Coliform

Water Body	Pacific Ocean at El Capitan Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Used Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-6 years old (9/4/96 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: none.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 12/1-29/97; 2/2-3/2/98; 8/17-9/14/98; 1/24-2/22/00; 1/29-2/26/01; 3/6-26/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Used Santa Barbara County Environmental Health methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Gaviota Beach (Mouth of Canada de la Gavio + Total Coliform

Water Body	Pacific Ocean at Gaviota Beach (Mouth of Canada de la Gaviota Creek)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standards is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable.
Water Body-specific Information	Data age = 1-5 years old (3/10/97 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 5/5-6/30/97; 3/8-5/3/99; 1/31-3/27/00; 7/31-9/28/00.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 4/21-5/19/97; 6/2-30/97; 11/3-12/1/97; 1/5-2/2/98; 6/15/98-9/21/98; 10/12/98- 12/7/98; 1/4-27/99; 3/15-4/14/99; 6/22-7/19/99; 8/16-9/13/99; 1/31-3/1/00; 3/6/00 [>10000]; 5/22/00-8/16/00; 9/5- 10/30/00; 11/27-12/26/00; 1/2/01-4/11/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for total coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Gaviota Beach (Mouth of Canada de la Gavio + Total Coliform

An adequate number of water quality measurements exceeded the water quality standard for total coliform. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at Goleta Beach (Santa Barbara County)

Fecal and Total Coliform

Water Body	Pacific Ocean at Goleta Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Used Santa Barbara County Environmental Health Dept. QA/QC .
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (1/27/97 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 9/8-11/2/98; 2/5-4/2/01.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 2/2-3/2/98; 3/15-4/14/99; 2/7-3/8/00; 1/4-29/01; 2/5-28/01; 3/6-8/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

Total coliform

Water Body	Pacific Ocean at Guadalupe Dunes (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (1/27/97- 4/23/0).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: none.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 6/9-7/7/97; 6/29-7/27/98; 8/2-30/99; 7/5-31/00; 9/5-10/2/00; 2/12-3/12/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Hammonds Beach (Santa Barbara County)

Fecal Coliform

Water Body	Pacific Ocean at Hammonds Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (1/6/97 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 1/27-3/23/98; 2/22-4/19/00.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 1/6-2/3/97; 3/3-31/97; 12/1-29/97; 2/2-3/2/98; 3/9-4/6/98; 10/12-11/9/98; 1/31-2/28/00; 2/5-3/6/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for fecal coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of water quality measurements exceeded the water quality standard for fecal coliform. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

Fecal Coliform

Water Body	Pacific Ocean at Hope Ranch Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (1/6/97- 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 2/2-3/30/98; 1/18-3/13/00.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 2/3-3/3/97; 12/1-29/97; 2/2-3/2/98; 11/30-12/28/98; 3/15-4/14/99; 10/11-11/8/99; 1/3-31/00; 1/31-2/28/00; 3/6/00; 4/17/00 [>10,000]; 10/30-11/27/00; 1/2-29/01; 2/5-26/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for fecal coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

Fecal Coliform

An adequate number of water quality measurements exceeded the water quality standard for fecal coliform. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at Jalama Beach (Santa Barbara County)

Fecal Coliform

Water Body	Pacific Ocean at Jalama Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/Ocean Plan Shellfish Harvest and REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standard is linked to Shellfish Harvest and REC-1.
Utility of measure for judging if standards or uses are not attained	Assembly Bill Beach 411 Posting is applicable to Shellfish Harvest and REC-1.
Water Body-specific Information	Data age = 1-5 years old.
Data used to assess water quality	222 bacteria samples, 111 samples exceeding (50%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Pasture Lands, Agriculture, Nonpoint and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Pacific Ocean at Jalama Beach (Santa Barbara County)

Total Coliform

Water Body	Pacific Ocean at Jalama Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/Ocean Plan Shellfish Harvest and REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Public Health Dept. (SBCPHD) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Total Coliform Ocean Plan WQO is linked to Shellfish Harvest and REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan WQO is applicable to Shellfish Harvest and REC-1.
Water Body-specific Information	Data age = 1-5 years old.
Data used to assess water quality	222 bacteria samples, 118 samples exceeding (53%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Santa Barbara County Public Health Dept. (SBCPHD) methods.
Potential Source(s) of Pollutant	Pasture Lands, Agriculture, Nonpoint and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Pacific Ocean at Leadbetter Beach (Santa Barbara County)

Fecal and Total Coliform

Water Body	Pacific Ocean at Leadbetter Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC .
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (1/6/97 - 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 12/2/96- 1/27/97; 11/3-12/29/97; 2/2-3/30/98.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 1/6-1/27/97; 11/3-12/1/97; 2/2-3/2/98; 11/1-29/99; 2/7-3/8/00; 2/12-3/12/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling (with the exception of a few weeks).
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methodology.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at New Brighton Beach (Santa Cruz County)

Total Coliform

Water Body	Pacific Ocean at New Brighton Beach (Santa Cruz County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-3 years old (5/26/99 - 10/31/01).
Data used to assess water quality	Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: None. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for: 10/2-10/31/00.
Spatial representation	1 site.
Temporal representation	Weekly sampling (with a few weeks missing).
Data type	Numerical data.
Use of standard method	Santa Cruz County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Ocean Beach (Santa Barbara County)

Total and Fecal Coliform

Water Body	Pacific Ocean at Ocean Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Total and Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Total and Fecal Coliform Ocean Plan standard is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable.
Water Body-specific Information	Data age = 1-5 years old (4/7/97- 4/16/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 10/12-12/7/98; 3/15-5/10/99.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 1/5-2/2/98; 1/27-2/23/98; 5/4-6/1/98; 6/15-8/17/98; 10/5-11/30/98; 1/4-2/1/99; 3/8-6/28/99; 8/2-30/99; 9/7-10/4/99; 2/28/00 [>10000].</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Ocean Beach (Santa Barbara County)

Total and Fecal Coliform

An adequate number of water quality measurements exceeded the water quality standard for total coliform. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

Fecal Coliform

Water Body	Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-3 years old (5/5/99 - 5/30/01).
Data used to assess water quality	Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: 2/23-4/26/00. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for: Insufficient data.
Spatial representation	1 site.
Temporal representation	Weekly sampling (with a few weeks missing).
Data type	Numerical data.
Use of standard method	Santa Cruz County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Point Rincon (Mouth of Rincon Creek, Santa + Fecal and Total Coliform

Water Body	Pacific Ocean at Point Rincon (Mouth of Rincon Creek, Santa Barbara County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (5/5/97- 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 6/23-8/18/97; 11/3-12/29/97; 5/18-8/17/98; 1/19-3/15/99; 3/6-5/1/00.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 5/13/97- 8/11/97; 10/27- 11/17/97; 12/1-29/97; 1/5/98- 10/26/98 (all); 1/4-2/1/99; 3/15-4/12/99; 7/19-8/16/99; 10/18-11/15/99; 1/31-2/28/00; 3/6/00 [>10000]; 10/2-30/00; 2/12-3/8/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Point Rincon (Mouth of Rincon Creek, Santa + Fecal and Total Coliform

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at Refugio Beach (Santa Barbara County)

Total Coliform

Water Body	Pacific Ocean at Refugio Beach (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-5 years old (3/10/97- 4/23/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: 10/4-11/29/99; 2/5-3/26/01.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 6/2-30/97; 12/1-29/97; 1/5/98-5/4/98; 6/1-29/98; 8/3/98-11/30/98; 3/1-29/99; 4/5-5/3/99; 6/28-8/30/99; 10/25-11/22/99; 1/31-3/1/00; 3/6/00 [>10000]; 6/5-7/5/00; 2/5- 3/26/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standard for total coliform are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered.

Region 3: Pacific Ocean at Refugio Beach (Santa Barbara County)

Total Coliform

An adequate number of water quality measurements exceeded the water quality standard for total coliform. The staff confidence that standards were exceeded is moderate.

Region 3: Pacific Ocean at Rio Del Mar (Santa Cruz County)

Fecal and Total Coliform

Water Body	Pacific Ocean at Rio Del Mar (Santa Cruz County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/Ocean Plan Water Contact Standards and REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. QA/QC methodology.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1 .
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable the REC-1.
Water Body-specific Information	Data age = 1- 4 years old (1/5/98 - 5/30/01).
Data used to assess water quality	Rio Del Mar Beach at Aptos Creek Mouth: Fecal Coliform Objective (>10% of samples in 60 days exceed 400 per 100 ml) exceeded for: 9/7-11/18/99; 11/18/99-1/10/00. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for: 12/11/00-1/8/01; 1/29/01-2/26/01.
Spatial representation	7 sites.
Temporal representation	For Rio Del Mar Beach @ Aptos Creek Mouth; weekly sampling (with a few weeks missing). For remaining sites: Highly variable.
Data type	Numerical data.
Use of standard method	Santa Cruz County Environmental Health Dept.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Sands Beach - Coal Oil Point (Santa Barbar + Total Coliform

Water Body	Pacific Ocean at Sands Beach - Coal Oil Point (Santa Barbara County)
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Environmental Health Dept. data, QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-8 years old (10/21/96- 4/25/01).
Data used to assess water quality	<p>Fecal Coliform Objective (>10% samples in 60 days exceed 400 per 100 ml) exceeded for at least: none.</p> <p>Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for at least: 11/18-12/16/96; 12/29/97-1/27/98; 2/2-3/2/98; 2/7-3/6/00; 2/5-3/6/01.</p>
Spatial representation	1 site.
Temporal representation	Weekly sampling.
Data type	Numerical data.
Use of standard method	Santa Barbara County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

Fecal and Total Coliform

Water Body	Pacific Ocean at Twin Lakes Beach (Santa Cruz County)
Stressor/Media/Beneficial Use	Fecal and Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Santa Cruz County Environmental Health Dept. QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal and Total Coliform Ocean Plan standards are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data age = 1-3 years old (4/26/99 - 5/30/01).
Data used to assess water quality	Fecal Coliform Objective (Geometric mean exceed 200 per 100 ml in 30 days) exceeded for 1/20-2/27/00 (>10% of samples in 60 days exceeded 400 per 100 ml) exceeded for: 9/7-11/18/99; 11/18/99-1/10/00. Total Coliform Objective (>20% of samples in 30 days exceed 1,000 per 100 ml) exceeded for: 1/29-2/26/01.
Spatial representation	1 site.
Temporal representation	Weekly sampling (with a few weeks missing).
Data type	Numerical data.
Use of standard method	Santa Cruz County Environmental Health Dept. methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively small number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Pajaro River

Fecal Coliform

Water Body	Pajaro River
Stressor/Media/Beneficial Use	Fecal Coliform/Water/Basin Plan WQO
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-5 years old.
Data used to assess water quality	11 bacteria samples, 10 samples exceeding (90%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture lands, Agriculture, and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Pennington Creek

Fecal Coliform

Water Body	Pennington Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-8 years old (samples taken from 6/1993 to 5/1999).
Data used to assess water quality	237 samples, 68 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Quail Creek

Fecal Coliform

Water Body	Quail Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	6 bacteria samples, 4 samples exceeding (63%) WQO.
Spatial representation	1 sampling site.
Temporal representation	Spring and winter sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture lands, Agriculture, and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Quail Creek

Nitrate

Water Body	Quail Creek
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Municipal Drinking Water.
Water Body-specific Information	Data age = 3 years old (samples taken from 2/1/99 to 11/30/99).
Data used to assess water quality	6 samples, 4 samples exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited insufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the age of the data were considered. <p>An inadequate number of the water quality measurements collected to determine whether the water quality standard was exceeded. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Quail Creek

Boron

Water Body	Quail Creek
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agricultural Water Supply.
Water Body-specific Information	Data age = 3 years old (samples taken from 7/1999 to 11/1999).
Data used to assess water quality	7 samples, 1 sample exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Quail Creek

Dissolved Oxygen

Water Body	Quail Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/1/1999 to 2/10/2000; over 8 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 11 samples, 1 sample exceeding.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Salinas Reclamation Canal

Fecal Coliform

Water Body	Salinas Reclamation Canal
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	37 bacteria samples, 33 samples exceeding (89%) WQO.
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Urban runoff, Pasture Lands, Natural Sources and Agriculture.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas Reclamation Canal

Dissolved Oxygen

Water Body	Salinas Reclamation Canal
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/1/1999 to 2/10/2000; over 27 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 39 samples, 17 samples exceeding.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas Reclamation Canal

Nitrate

Water Body	Salinas Reclamation Canal
Stressor/Media/Beneficial Use	Nitrate/Water/Drinking Water
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/1/1999 to 2/10/2000).
Data used to assess water quality	34 samples with 13 samples exceeding.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas River (lower, estuary to near Gonzales Rd crossing, + Dissolved Oxygen

Water Body	Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 309.10 and 309.20)
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is linked to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/1/1999 to 5/15/2000; over 29 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 64 samples with 3 samples exceeding.
Spatial representation	4 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Salinas River (lower, estuary to near Gonzales Rd crossing, + Fecal Coliform

Water Body	Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 309.10 and 309.20)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old [samples taken from 2/99 to 2/00; 13 sampling dates (some sampling dates have multiple samples)].
Data used to assess water quality	54 samples, 14 samples exceeding WQO.
Spatial representation	4 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas River (lower, estuary to near Gonzales Rd crossing, + Boron

Water Body	Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 309.10 and 309.20)
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP)
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agricultural Water Supply.
Water Body-specific Information	Data age = 2-3 years old [samples taken from 7/1999 to 5/2000; 12 sampling dates (some sampling dates have multiple samples)].
Data used to assess water quality	13 samples, 4 samples exceeding WQO.
Spatial representation	4 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Salinas River (middle, near Gonzales Rd crossing to confluence + Dissolved Oxygen

Water Body	Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/2/1999 to 4/24/2000; over 27 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 51 samples with 5 exceedences.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	Unknown.
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Salinas River (middle, near Gonzales Rd crossing to confluence + Fecal Coliform

Water Body	Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 2/1999 to 4/2000; 15 sampling dates).
Data used to assess water quality	15 samples, 2 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Salinas River (upper, confluence of Nacimiento River to San + Chloride

Water Body	Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)
Stressor/Media/Beneficial Use	Chloride/Water/MUN and Agriculture
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Chloride WQO is linked to Agriculture and MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN and Agriculture.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	42 water samples, 42 samples exceeding (100%) WQO.
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Urban Runoff, Pasture Lands.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas River (upper, confluence of Nacimiento River to San + Dissolved Oxygen

Water Body	Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 3-5 years old (samples taken from 2/2/1999 to 5/15/2000; over 16 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 29 samples with 4 samples exceeding.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Salinas River (upper, confluence of Nacimiento River to San + Sodium

Water Body	Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)
Stressor/Media/Beneficial Use	Sodium/water/Agriculture and MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sodium is linked to Agriculture and MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture and MUN.
Water Body-specific Information	Data age = 2-3 years old
Data used to assess water quality	32 water samples, 32 samples exceeding (100%) WQO.
Spatial representation	3 Stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Urban Runoff, Pasture Lands.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate, quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Salinas River (upper, confluence to Nacimiento River to Mar + Fecal Coliform

Water Body	Salinas River (upper, confluence to Nacimiento River to Margarita Reservoir)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-5 years old (samples taken from 2/1999 to 2/2000; 7 sampling dates).
Data used to assess water quality	7 samples, 1 sample exceeding WQO.
Spatial representation	4 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that: The data exhibited insufficient spatial and temporal coverage.</p>

Region 3: Salinas River near Chualar

Sulfate

Water Body	Salinas River near Chualar
Stressor/Media/Beneficial Use	Sulfate/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	USGS QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Sulfate WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 1-5 years old (1997-2001).
Data used to assess water quality	16 samples, 3 samples exceeding WQO.
Spatial representation	One segment of river near Chualar, CA (Represents only one location on Salinas River.).
Temporal representation	16 samples collected over 5 years.
Data type	Numerical data.
Use of standard method	USGS methods were used.
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: San Antonio Creek (San Antonio Watershed)

Boron

Water Body	San Antonio Creek (San Antonio Watershed)
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	USGS QA/QC
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO is applicable Agricultural Water Supply.
Water Body-specific Information	Data age = 1-4 years old (1998-2001).
Data used to assess water quality	6 samples, 4 samples exceeding WQO.
Spatial representation	One station.
Temporal representation	Winter, Spring, and Summer for 1998-2001 (6 sampling events).
Data type	Numerical data.
Use of standard method	USGS methods were used.
Potential Source(s) of Pollutant	Unknown, may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited insufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>A relatively low number of the water quality measurements were collected to determine whether the water quality standard was exceeded. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: San Antonio River

Fecal Coliform

Water Body	San Antonio River
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP)
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-5 years old. (samples taken from 2/1999 to 5/2000; 16 sampling dates).
Data used to assess water quality	16 samples, 4 samples exceeding WQO.
Spatial representation	1 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited insufficient spatial and sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: San Benito River

Dissolved Oxygen

Water Body	San Benito River
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 4-5 years old (samples taken from 12/18/1997 to 12/16/1998; over 15 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 15 samples, 0 samples exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: San Benito River

Fecal Coliform

Water Body	San Benito River
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 4-5 years old (samples taken from 12/1997 to 12/1998; 12 sampling dates).
Data used to assess water quality	12 samples, 5 samples exceeding WQO.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: San Bernardo Creek

Fecal Coliform

Water Body	San Bernardo Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-9 years old (samples taken from 6/1993 to 5/1999).
Data used to assess water quality	198 samples, 90 samples exceeding WQO.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: San Bernardo Creek

Dissolved Oxygen

Water Body	San Bernardo Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 4-9 years old (samples taken from 6/8/1993 to 5/4/1998; over 190 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 355 samples, 15 samples exceeding.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: San Bernardo Creek

Dissolved Oxygen

An inadequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were not exceeded is high.

Region 3: San Lorenzo Creek

Fecal Coliform

Water Body	San Lorenzo Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	15 bacteria samples, 9 samples exceeding (60%). WQO, Station LOK 15 samples exceeding (100%).
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Urban Runoff, Pasture Lands and Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>All number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 3: San Lorenzo Creek

Boron

Water Body	San Lorenzo Creek
Stressor/Media/Beneficial Use	Boron/Water/Agricultural Water Supply
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Boron WQO is linked to Agricultural Water Supply.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture Water Supply.
Water Body-specific Information	Data age = 2-3 years old (samples taken from 7/1999 to 2/2000).
Data used to assess water quality	10 samples, 10 samples exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP).
Potential Source(s) of Pollutant	Unknown; may be natural condition.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: San Lorenzo River Lagoon

Sediment-Siltation

Water Body	San Lorenzo River Lagoon
Stressor/Media/Beneficial Use	Sediment-Siltation/Water/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	Unknown.
Linkage between measurement endpoint and beneficial use or standard	Sedimentation-Siltation is linked to the aquatic life beneficial use.
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	The original data appears to have been based on generic information that was not truly indicative of the conditions in the San Lorenzo River Lagoon. The City of Santa Cruz's 1989 study of the lower San Lorenzo River, which includes the Lagoon Management Plan, has established that problems within the lagoon are associated with the breaching of the sand bar that becomes established between the lagoon and Monterey Bay, and are not due to the delivery of sediment from upstream sources.
Spatial representation	Water Street in Santa Cruz to Monterey Bay at the Boardwalk amusement park.
Temporal representation	The study of the Lagoon was completed in 1989.
Data type	Non-numerical description of the Lagoons conditions.
Use of standard method	N/A
Potential Source(s) of Pollutant	The report describes the problem being associated with breaching the sand bar.
Alternative Enforceable Program	N/A
RWQCB Recommendation	Maintain Listing.
SWRCB Staff Recommendation	After reviewing the available information provided by the RWQCB and the recommendation, SWRCB staff concludes that the water body should be removed from the section 303(d) list because there was originally no information to support listing and currently there is no information available to assess if the problem due to a pollutant (upstream sediment sources).

Region 3: San Luis Obispo Creek below W. Marsh Street

Priority Organics

Water Body	San Luis Obispo Creek below W. Marsh Street
Stressor/Media/Beneficial Use	Priority Organics/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC and TSMP
Linkage between measurement endpoint and beneficial use or standard	Priority Organics and PCBs MTRLS are linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	CTR for MTRLS in freshwater is applicable to Fish Consumption.
Water Body-specific Information	<p>Change listing from Priority Organics to PCBs. The following water body information is based on PCB data.</p> <p>Data 3 - 12 years old, data collected at site (Goldfish tissue sample in 1990 and a composite sample of 20 whole fish in 1999), species present at site, one time sample event.</p>
Data used to assess water quality	2 composite sample, 2 samples exceeding (PCBs).
Spatial representation	Two samples (A composite of 20 fish and a goldfish tissue sample).
Temporal representation	One time sampling event in the winter of 1990 and one in the spring of 1999.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) and TSMP methods.
Potential Source(s) of Pollutant	Unknown Sources.
Alternative Enforceable Program	
RWQCB Recommendation	Change Listing from Priority Organics to PCBs. PCBs MTRLS exceedance in fish tissue.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be maintained on the list for Priority Organics until more information is collected to support the change in listing. There is insufficient data to change the listing from Priority Organics to PCBs. The PCB information submitted to change listing was based on only two fish tissue samples, one in 1992 and the other in 1999.</p> <p>The data exhibited insufficient temporal coverage. An inadequate amount of water quality measurements are available to make the determination to change the pollutant designation.</p>

Region 3: San Luisito Creek

Fecal Coliform

Water Body	San Luisito Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-9 years old (samples taken from 6/1993 to 5/1999).
Data used to assess water quality	207 samples, 85 samples exceeding.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Santa Barbara Channel/various sites

Total coliform, E. coli, Enterococcus, nitrite, phosphate, sulfate, tu +

Water Body	Santa Barbara Channel/various sites
Stressor/Media/Beneficial Use	Total coliform, E. coli, Enterococcus, nitrite, phosphate, sulfate, turbidity, Dissolved Oxygen Temperature, conductivity and pH/Water/REC-1, WILD, MAR.
Data quality assessment. Extent to which data quality requirements met.	Santa Barbara County Creek Watchers (no QA Procedures).
Linkage between measurement endpoint and beneficial use or standard	Measurements are linked to Aquatic Life, REC-1 and MUN.
Utility of measure for judging if standards or uses are not attained	Guidelines were not provided, so there is no applicability to Beneficial Use. Insufficient data was collected. Only 4 samples were collected. In addition, QA procedures were not used.
Water Body-specific Information	Date age = 2 years old (collected from 2001-2002)
Data used to assess water quality	250 sample events.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Numerical.
Use of standard method	Standard methods were not used.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because data was collected in absent of QA/QC, standard methods and insufficient data.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of inadequate quality. 2. Standard methods used in sample collection is unknown. <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded extremely low.</p>

Region 3: Santa Maria River

Dissolved Oxygen

Water Body	Santa Maria River
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen are linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is linked to Aquatic Life.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/12/2000 to 2/28/2001, over 15 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 32 samples with 0 samples exceeding.
Spatial representation	3 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Santa Maria River

Fecal Coliform

Water Body	Santa Maria River
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 1-2 years old.
Data used to assess water quality	33 bacteria samples, 17 samples exceeding (52%) WQO.
Spatial representation	3 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture Lands, Urban Runoff, Agriculture, Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited adequate spatial and sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Santa Maria River

Nitrate

Water Body	Santa Maria River
Stressor/Media/Beneficial Use	Nitrate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to MUN.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to MUN.
Water Body-specific Information	Data age = 1 year old.
Data used to assess water quality	23 water samples, 23 samples exceeding (100%) WQO.
Spatial representation	2-3 sites.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Urban Runoff, Agriculture and Pasture Lands.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Santa Maria River Estuary

Organochlorine

Water Body	Santa Maria River Estuary
Stressor/Media/Beneficial Use	Organochlorine/Sediment and Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and TSMP
Linkage between measurement endpoint and beneficial use or standard	Sediment ERM-PEL guidelines are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs in sediment and tissue are applicable to Aquatic Life.
Water Body-specific Information	Data is 3-9 years old, data measured from site/water body, one sediment sample and a composite tissue sample of 20 stickleback fish, sediment sample collected in February 1993 and tissue sample collected in August 1999.
Data used to assess water quality	1 sediment sample, 1 tissue sample exceeding.
Spatial representation	Based on sediment sample and a tissue sample that is a composite of 20 fish.
Temporal representation	Samples collected from Winter and Summer, however one sample was collected in 1993 and the other in 1999.
Data type	Numerical data.
Use of standard method	BPTCP and TSMP methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedance in ERM-PELs in sediment and tissue.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list. Data was collected from two different media taken 6 years apart with only one sample for each sediment and tissue.</p> <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Selected sites in Monterey Bay

Nickel, chromium, arsenic

Water Body	Selected sites in Monterey Bay
Stressor/Media/Beneficial Use	Nickel, Chromium, Arsenic/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	1998 Master Thesis by Anuraag Gill
Linkage between measurement endpoint and beneficial use or standard	Metals in sediment are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Metals concentrations in sediments can impact Aquatic Life.
Water Body-specific Information	BPTCP protocol were used (used TEL, not PEL). Therefore insufficient data quality to list. Toxicity data was not available.
Data used to assess water quality	Unknown.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Natural geologic sources.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list due to lack of QA/QC and standard methods used in the collection and processing of samples.</p> <p>An inadequate amount of the water quality measurements exceeding the water quality standard is unknown. The staff confidence that standards were exceeded is extremely low.</p>

Region 3: Sisquoc River

Dissolved Oxygen

Water Body	Sisquoc River
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 1-2 years old (samples taken from 1/12/2000 to 2/28/2001; over 16 sampling dates).
Data used to assess water quality	Dissolved Oxygen; 20 sample with 3 samples exceeding.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list for dissolved oxygen because applicable water quality standard is not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard for dissolved oxygen. The staff confidence that standards were not exceeded is high.</p>

Region 3: Soda Lake

Dissolved Oxygen

Water Body	Soda Lake
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 2 years old (samples taken from 1/11/2000 to 5/1/2000; over 6 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 7 samples with 4 samples exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it can not be determined if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient temporal coverage.</p>

Region 3: Tembladero Slough

Fecal Coliform

Water Body	Tembladero Slough
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 2-3 years old.
Data used to assess water quality	8 bacterial samples, 5 samples exceeding (63%) WQO.
Spatial representation	1 site.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Pasture Lands, Urban Runoff, Agriculture, Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Tembladero Slough

Dissolved Oxygen

Water Body	Tembladero Slough
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age 2-3 years old (samples taken from 3/1/1999 to 2/7/2000, over 12 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 11 samples, 1 sample exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 3: Tequisquita Slough

Fecal Coliform

Water Body	Tequisquita Slough
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 4-5 years old.
Data used to assess water quality	16 bacteria samples, 10 samples exceeding (63%) WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Agriculture, Nonpoint Sources and Natural Sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information considered includes age of the data. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Tequisquita Slough

Dissolved Oxygen

Water Body	Tequisquita Slough
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 4-5 years old (samples taken from 12/18/1997 to 12/16/1998; over 15 sampling dates).
Data used to assess water quality	Dissolved Oxygen: 19 samples with 3 samples exceeding.
Spatial representation	1 sampling site.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list for dissolved oxygen because the applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standards for dissolved oxygen. The staff confidence that standards were exceeded is moderate.</p>

Region 3: Upper Salinas River/tributaries

Temperature, Nutrients, Turbidity, Dissolved Oxygen

Water Body	Upper Salinas River/tributaries
Stressor/Media/Beneficial Use	Temperature, Nutrients, Turbidity, Dissolved Oxygen/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data was collected by the Las Tablas Resource Conservation District, however quality assurance information was not provided with the data. It is unknown if the measurements provided are reliable.
Linkage between measurement endpoint and beneficial use or standard	Measurements are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	The measurements can be compared to the water quality objectives in the Basin Plan.
Water Body-specific Information	
Data used to assess water quality	<p>Data are summarized by month. The summaries indicate that for the most part data do not exceed water quality standards. The summaries show that dissolved oxygen data might exceed standards for Atascadero Creek and upper Salinas River. However, no QA/QC was provided and it is unclear how the summaries were developed. Unsummarized data are not in the record.</p> <p>RWQCB CCAMP monitoring data for dissolved oxygen shows that water quality standards are not exceeded in this water body.</p>
Spatial representation	20 stations. 19 stations have 6 samples. Only one station has 10 samples. The data only included general water quality descriptions including temperature, nutrients, turbidity, and dissolved oxygen. Most stations only had one or two sampling events. The station with the highest number of samples had four sampling events.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	The methods used to collect the data are presented in the submittal but the methods are not referenced to standard methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list. There was not enough data to determine water quality conditions. In addition, quality assurance information was not provided.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the list due to lack of QA/QC and standard methods used in collection samples.</p> <p>An inadequate number of the water quality measurements were taken to</p>

Region 3: Upper Salinas River/tributaries

Temperature, Nutrients, Turbidity, Dissolved Oxygen

determine whether the water quality standards were exceeded. The staff confidence that standards were exceeded is extremely low.

Region 3: Uvas Creek

Fecal Coliform

Water Body	Uvas Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 4-5 years old (samples taken from 12/97 to 12/98).
Data used to assess water quality	7 samples, 2 samples exceeding.
Spatial representation	4 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited insufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 3: Walters Creek

Fecal Coliform

Water Body	Walters Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data age = 3-9 years old (samples taken from 6/1993 to 5/1999).
Data used to assess water quality	141 samples, 75 exceeding WQO.
Spatial representation	1 station.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Warden Creek

Fecal Coliform

Water Body	Warden Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Morro Bay National Monitoring Program (MBNMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data age = 3-6 years old (samples taken from 3/1996 to 4/1999).
Data used to assess water quality	292 samples, 110 samples exceeding.
Spatial representation	2 stations.
Temporal representation	Monthly sampling events.
Data type	Numerical data.
Use of standard method	Morro Bay National Monitoring Program (MBNMP) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Warden Creek

Dissolved Oxygen

Water Body	Warden Creek
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/COLD and WARM
Data quality assessment. Extent to which data quality requirements met.	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen is linked to COLD and WARM beneficial uses.
Utility of measure for judging if standards or uses are not attained	Exceedances of Basin Plan water quality objective in place for the protection of aquatic life.
Water Body-specific Information	Samples taken from 12/14/93 to 5/18/98 with over 168 sampling dates.
Data used to assess water quality	Dissolved Oxygen: 407 samples with 144 exceedances.
Spatial representation	2 sampling sites.
Temporal representation	Monthly sampling.
Data type	Numerical data.
Use of standard method	Central Coast Ambient Monitoring Program (CCAMP) methods.
Potential Source(s) of Pollutant	Unknown, low dissolved oxygen can be a natural phenomenon, e.g. induced by low-flow during dry seasons, or anthropogenically induced; e.g. removal of riparian vegetation and/or nutrient loading. Determination will require further analysis.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant probably contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 3: Watsonville River

Metals (copper, zinc, lead)

Water Body	Watsonville River
Stressor/Media/Beneficial Use	Metals (copper, zinc, lead)/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Original data of unknown quality, newly submitted data of satisfactory to high quality.
Linkage between measurement endpoint and beneficial use or standard	Water column data directly comparable to numeric objectives for designated beneficial use.
Utility of measure for judging if standards or uses are not attained	Numeric data directly comparable to water quality objective.
Water Body-specific Information	Original data from Sept. 1994; new data (submitted in 2002) from early 1996 through May 2002.
Data used to assess water quality	Total water column copper, lead, and zinc. Out of 30 samples collected, none exceeded the water quality standards for these metals.
Spatial representation	Similar spatial coverage/locations as original 1994 sampling.
Temporal representation	Original listing on Sept. 1994 data only, new data cover multiple months of 6 years.
Data type	Numerical data.
Use of standard method	Original (1994) data = unknown. New data = yes (County, Water Authority, and RWQCB collected).
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 3: Watsonville Slough

Oil and Grease

Water Body	Watsonville Slough
Stressor/Media/Beneficial Use	Oil and Grease/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Original data of unknown quality, newly submitted data of satisfactory to high quality.
Linkage between measurement endpoint and beneficial use or standard	Water column data directly comparable to narrative objectives for designated beneficial use; numeric indicator similar to numeric criteria used by state of Florida.
Utility of measure for judging if standards or uses are not attained	Numeric data as indicator value for narrative objective.
Water Body-specific Information	Original data 5 samples from 1994 study; new data from February and May 2002.
Data used to assess water quality	23 samples all non-detect for Oil & Grease using EPA lab Method and acceptable detection limits.
Spatial representation	11 locations throughout slough system (10 locations used in 1994 watershed study).
Temporal representation	Original listing based on 4 monthly samples from Sept. – Dec. 1994; new data cover two months (February and May) of 2002.
Data type	Numerical data.
Use of standard method	Original (1994) data = unknown New data = RWQCB collected, Method for Oil & Grease, EPA Method 1664.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used. 6. Other water body- or site-specific information including the effects age of the data were considered.

Region 3: Watsonville Slough

Oil and Grease

All of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 3: Zayante Creek Sedimentation-Siltation

Water Body	Zayante Creek
Stressor/Media/Beneficial Use	Sedimentation-Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data quality assurance procedures used. Assessment made of the consistency of methods used.
Linkage between measurement endpoint and beneficial use or standard	Geomorphological data linked to Aquatic Life protection
Utility of measure for judging if standards or uses are not attained	Sedimentation can directly affect aquatic life.
Water Body-specific Information	Data = 2 years (1998 and 1999), Samples collected from site.
Data used to assess water quality	Riffle/Run embeddedness = 45% samples exceed at Site 13a and 13b, 40% samples exceed at Site 13e, 54% samples exceed at Site Z-1, 47% samples exceed at Site Z-2, 39% samples exceed at Site Z-4, 42% samples exceed at Site Z-5, 46% samples exceed at Site Z-6. For Fine Sediments in Riffles = 40% samples exceed at Site 13b, 50% samples. Data showed impacts on fish population due to sedimentation/siltation in 1998 and 1999. exceed at Site 13c, 45% samples exceed at Site 13d, 38% samples exceed at Site Z-1, 34% samples exceed at Site Z-2. For D50: 37mm (minimum for a reach) = 12mm at Site Z-1, 14mm at Site Z-2, 24mm at Site Z-5, 30mm at Site Z-7.
Spatial representation	Zig-Zag sample design, 10 samples
Temporal representation	Late spring-early summer.
Data type	Numerical data.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	Improper/illegal grading of private roads and home sites, lack of vegetation around home sites, agriculture, residential use, roads and timber.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited adequate spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate.

Region 3: Zayante Creek

Sedimentation-Siltation

6. Data are numerical.
7. Standard methods were used.
8. Other water body- information including riffle/run embeddedness and age of the data were considered.

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate, uncertain on how to interpret riffle/run embeddedness.

Reference List for Region 3

Staff Report

California Regional Water Quality Control Board. Central Coast Region. 2001. Staff Report for the Regular Meeting of October 26, 2001. Subject: Changes to 303(d) List of Impaired Water Bodies. October 4, 2001.

Contacts

Al Haynes. San Lorenzo Valley Water District

California Department of Pesticide Regulation, 1001 I Street, P.O. Box 4015, Sacramento, CA 95812-4015

Chris Berry. City of Santa Cruz Water Department

Cindy H. Wu, Environmental Health Technician, Ocean Water Monitoring Program. Santa Barbara County Public Health Dept

Don Funk. Upper Salinas-Las Tablas Resource Conservation District/Upper Salinas Watershed Coalition

Eric Kingsley, Water Quality Specialist. Monterey Bay Aquarium

Jessica Altstatt. Santa Barbara Channel Keeper

Jill Carlson. Santa Barbara County Creek Watchers

John Hunt, Research Specialist.

Nina Gill. (Masters Thesis)

Patricia A Shiffer. United States Geological Survey

Southern California Alliance of Publicly Owned Treatment Works. 30200 Rancho Viejo Rd, Suite B, San Juan Capistrano, CA 92675

U.S. Department of the Air Force.

Regional Board Documents/Data

Al Haynes. San Lorenzo Water District

Brian Troutwein, Environmental Analyst. Environmental Defense Center

Chris Berry. City of Santa Cruz Water Department

Chris Rose. RWQCB #3

Danial Reid, Project Manager. Public Health Department, Environmental Health Services

Danial Reid, Project Manager. Santa Barbara County, Public Health Department, Environmental Health Services

David Smith. United States Environmental Protection Agency

Drew Bohan, Executive Director. Santa Barbara Channel Keeper

Heal the Ocean, September 13, 2001.

James Nelson, President Board of Directors. San Lorenzo Water District

Jodi Frediani, Executive Director. Citizens for Responsible Forest Management

Kevin Collins, Board President. Lompico Watershed Conservancy

Matt Fabry. RWQCB #3

Patricia Anderson, Associate Fishery Biologist. California Department of Fish and Game

Robert N. Tasto, Supervisor. Project Review and Water Quality Program, Marine Region, Department of Fish and Game,

Sharyn Main. South Coast Watershed Alliance

Southern California Alliance of Publicly Owned Treatment Works. 30200 Rancho Viejo Rd, Suite B, San Juan Capistrano, CA 92675

Stephen F. Mack, Water Supply Manager. City of Santa Barbara

University of Southern California. University of Southern California

Regional Water Quality Control Board

LOS ANGELES REGION (4)



SECTION 303 (d) LIST PROPOSALS

Page left blank intentionally.

Region 4: Avalon Beach-between BB restaurant and Tuna Club

Bacterial Indicators

Water Body	Avalon Beach-between BB restaurant and Tuna Club
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	42 samples, 7 samples exceeding.
Spatial representation	1 station: DHS (120) which is the same as DHS (126)99. This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	None.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Avalon Beach-between Pier and BB restaurant (1/3)

Bacterial Indicators

Water Body	Avalon Beach-between Pier and BB restaurant (1/3)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	43 samples, 14 samples exceeding
Spatial representation	1 station: DHS118. This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Avalon Beach-between Pier and BB restaurant (2/3)

Bacterial Indicators

Water Body	Avalon Beach-between Pier and BB restaurant (2/3)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	43 sample, 10 samples exceeding.
Spatial representation	1 station: DHS(119). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Avalon Beach-between storm drain and Pier (1/3)

Bacterial Indicators

Water Body	Avalon Beach-between storm drain and Pier (1/3)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial indicator densities data/beach postings and closure are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Beach postings and closure as a result of bacterial indicator data is applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	17 samples exceeding standards out of 44 samples.
Spatial representation	1 station. This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Avalon Beach-between storm drain and Pier (2/3)

Bacterial Indicators

Water Body	Avalon Beach-between storm drain and Pier (2/3)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	43 samples, 17 samples exceeding.
Spatial representation	1 station: DHS(116). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Ballona Creek Silver

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Silver/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Use protection.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ballona Creek

Trash

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Ballona Creek

Arsenic

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Arsenic/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	MTRLs are not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRLs do not exist for arsenic and are not applicable to Aquatic Life.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	Data was not presented.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there is no MTRL guideline for arsenic.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because MTRL guidelines cannot be used for protection of aquatic life.

Region 4: Ballona Creek

Chem A

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QAPP
Linkage between measurement endpoint and beneficial use or standard	Chem A NAS guideline is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	Unknown (not mentioned).
Data used to assess water quality	Number of samples for old data is unknown and new data was not presented.
Spatial representation	Unknown: old data and new data was not presented.
Temporal representation	Unknown: old data and new data was not presented.
Data type	Unknown: old data and new data was not presented.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Originally recommended for delisting. Revaluation resulted in a recommendation to maintain on the list until new or alternate comparison value is available.
SWRCB Staff Recommendation	In the review of the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should not be removed from the section 303(d) list because the NAS guidelines are not outdated and remain a valid assessment tools.

Region 4: Ballona Creek Copper

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Copper/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown.
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ballona Creek Lead

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Lead/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Use protection.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ballona Creek

TBT

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	TBT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	There is not a valid assessment guideline for TBT in sediment.
Utility of measure for judging if standards or uses are not attained	There is not a valid assessment guideline for TBT in sediment.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there is not a valid assessment guidelines for TBT.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because there is no valid assessment guideline for TBT in sediment.

Region 4: Ballona Creek

Dissolved Lead

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Dissolved Lead/Water/Aquatic Life (warm water and freshwater, wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program.
Linkage between measurement endpoint and beneficial use or standard	Lead CTR criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Lead CTR criterion is applicable.
Water Body-specific Information	Data is 1 - 5 years old.
Data used to assess water quality	38 water samples, 5 (13.2%) above chronic criterion.
Spatial representation	Samples collected spatially along the creek.
Temporal representation	Fall, Winter, Spring, Summer in different years.
Data type	Numerical data.
Use of standard method	Los Angeles County Stormwater Program methods.
Potential Source(s) of Pollutant	Nonpoint.
Alternative Enforceable Program	
RWQCB Recommendation	List due to 10% exceedance for dissolved lead.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season and age of the data were considered. <p>Some of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Ballona Creek

Dissolved Copper

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Dissolved Copper/Water/Aquatic Life (warm water and freshwater, wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Department of Public Works
Linkage between measurement endpoint and beneficial use or standard	Copper CTR criterion is linked to Aquatic life.
Utility of measure for judging if standards or uses are not attained	Copper CTR criterion is applicable.
Water Body-specific Information	Data 1-5 years old, data measured in waterbody, environmental conditions (winter, spring in different years).
Data used to assess water quality	38 water samples, 17 Sample exceeding acute criteria, 21 samples exceeding in chronic criteria.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Fall, spring, winter, summer in different years.
Data type	Numerical data.
Use of standard method	LA County Stormwater Program methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, storm events and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Ballona Creek

Total Selenium

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Total Selenium/Water/Aquatic Life (warm water, and wildlife habitat).
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Department of Public Works.
Linkage between measurement endpoint and beneficial use or standard	Selenium CTR is linked to Aquatic life.
Utility of measure for judging if standards or uses are not attained	Selenium water quality criterion from the CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 3-5 years old, data measured in waterbody, environmental conditions is winter, spring in different years was considered.
Data used to assess water quality	25 water samples, 3 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Fall, spring, summer, winter in different years.
Data type	Numerical data.
Use of standard method	Los Angeles Department of Public Works methods.
Potential Source(s) of Pollutant	Nonpoint sources (Stormwater).
Alternative Enforceable Program	
RWQCB Recommendation	List due to 10% exceedances in total selenium.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, storm events and age of the data were considered. <p>Some of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Ballona Creek

Dissolved Zinc

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	Dissolved Zinc/Water/Aquatic Life (warm water and freshwater, wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Department of Public Works
Linkage between measurement endpoint and beneficial use or standard	Zinc CTR criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR criterion is applicable to Aquatic Life.
Water Body-specific Information	Data 1-5 years old, environmental data measured at site, samples collected multiple seasons.
Data used to assess water quality	39 water samples, 5 water samples exceeded.
Spatial representation	Data was collected spatially along the creek.
Temporal representation	Fall, spring, winter, summer in different years.
Data type	Numerical data.
Use of standard method	Los Angeles Department of Public Works methods.
Potential Source(s) of Pollutant	Nonpoint sources (possible sources include urban and stormwater runoff).
Alternative Enforceable Program	
RWQCB Recommendation	List due to 10% exceedance for zinc.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Ballona Creek pH

Water Body	Ballona Creek
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life (warm freshwater habitat and wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program
Linkage between measurement endpoint and beneficial use or standard	pH WQO is linked Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 1-5 years old, environmental data measured at site, samples collected during multiple seasons.
Data used to assess water quality	40 water samples, 5 water samples exceeding.
Spatial representation	Data was collected spatially along the creek.
Temporal representation	Fall and spring.
Data type	Numerical data.
Use of standard method	LA County Stormwater Program methods.
Potential Source(s) of Pollutant	Nonpoint sources (possible sources include urban and stormwater runoff).
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including season and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Ballona Creek Estuary

Aroclor

Water Body	Ballona Creek Estuary
Stressor/Media/Beneficial Use	Aroclor/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Aroclor MTRL not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRL is not applicable to Aquatic Life.
Water Body-specific Information	Data presented is 3-9 years old for Lead Chlordane DDE and PAH. There was no data presented for Aroclor. Data was measured in waterbody, Environmental conditions (fall, winter).
Data used to assess water quality	49 sediment samples were collected. The number Aroclor samples exceeding is unknown because data was not presented.
Spatial representation	Unknown.
Temporal representation	Fall/winter and different years.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides, stormwater runoff/aerial deposition from urban areas.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because it is listed for PCBs in tissue.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be listed on the 2002 section 303(d) list for Aroclor because the water body is already listed for PCBs. Aroclor is another name for polychlorinated biphenyls (PCB). This would result in a duplicate water body listing for the same pollutant.

Region 4: Ballona Creek Wetland

Arsenic

Water Body	Ballona Creek Wetland
Stressor/Media/Beneficial Use	Arsenic/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Arsenic MTRL is linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	MTRL is applicable to Fish Consumption.
Water Body-specific Information	Data 6 years old, Environmental data measured at site/waterbody, Species present, one-time sample.
Data used to assess water quality	1 fish tissue sample, number exceeding samples is unknown.
Spatial representation	One sample only.
Temporal representation	One sample event.
Data type	Numerical data.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist there is not a MTRL guideline for arsenic.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because there are no MTRL guidelines for arsenic.

Region 4: Burbank Western Channel

Cadmium

Water Body	Burbank Western Channel
Stressor/Media/Beneficial Use	Cadmium/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Quality assurance procedures followed by the City of Burbank are appropriate. All data quality procedures were met for the samples analyzed.
Linkage between measurement endpoint and beneficial use or standard	Cadmium water quality criterion in water is linked to Aquatic Life beneficial use.
Utility of measure for judging if standards or uses are not attained	Cadmium CTR water quality criterion is applicable.
Water Body-specific Information	Data age = 1 year, data was collected at the site, 15 samples were collected from summer 2001 through spring 2002.
Data used to assess water quality	15 water samples, 0 samples exceeding.
Spatial representation	2 sites.
Temporal representation	Samples were collected throughout the period from July 2001 - March 2002.
Data type	Numerical.
Use of standard method	Standard methods were used.
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Maintain Listing.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should remain on the section 303(d) list because there were an insufficient number of data points to determine if applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established for and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of season and age of the data were considered. <p>An inadequate number of the water quality measurements were collected to determine if water quality standard are not exceeded. The staff confidence that standards were not exceeded is low.</p>

Region 4: Calleguas Creek R9A, R9B, R10, R11, R12, R13 (was Conejo + Cadmium)

Water Body	Calleguas Creek R9A, R9B, R10, R11, R12, R13 (was Conejo Creek R1, R2, R3, R4)
Stressor/Media/Beneficial Use	Cadmium/Tissue/COMM BU
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2 + Silver

Water Body	Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2, R3, R4)
Stressor/Media/Beneficial Use	Silver/Tissue/COMM BU
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2 + Chromium

Water Body	Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2, R3, R4)
Stressor/Media/Beneficial Use	Chromium/Tissue/COMM BU
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	Unknown
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2 + Nickel

Water Body	Calleguas Creek R9A, R9B, R10, R11 (was Conejo Creek R1, R2, R3, R4)
Stressor/Media/Beneficial Use	Nickel/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	Unknown
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the listing was based on EDLs which are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek R9A, R9B, R10, R11, R13 (was Conejo Reach R + Dacthal

Water Body	Calleguas Creek R9A, R9B, R10, R11, R13 (was Conejo Reach R1, R2, R3, R4)
Stressor/Media/Beneficial Use	Dacthal/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to COMM.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to COMM.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek R9B (was part of Conejo Creek Reaches 1 and + Fecal Coliform

Water Body	Calleguas Creek R9B (was part of Conejo Creek Reaches 1 and 2)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons for 2 years.
Data used to assess water quality	12 bacteria samples, 3 samples exceeding the 400 MPN, Geomean of 243 exceed 200 MPN.
Spatial representation	1 site.
Temporal representation	All seasons during 1998-1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 1 (was Mugu Lagoon on the 1998 303(d) + Unknown

Water Body	Calleguas Creek Reach 1 (was Mugu Lagoon on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Unknown Pollutant/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Benthic Community Index is applicable to Aquatic Life.
Water Body-specific Information	
Data used to assess water quality	While there are benthic community impacts, these impacts are conditions of a water body. A number of pollutants are listed for Calleguas Creek Reach 1. In this specific case, these pollutants (e.g., copper, nickel, and zinc) likely cause or contribute to the benthic community impact conditions observed.
Spatial representation	No data presented.
Temporal representation	No data presented.
Data type	No data presented.
Use of standard method	No data presented.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff an aerial deposition from urban and agricultural areas.
Alternative Enforceable Program	
RWQCB Recommendation	List due to benthic community degradation.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because benthic community index information was not presented as well as contributing pollutant(s) were not identified. Benthic Community is a condition of a water body and not pollutants.

Region 4: Calleguas Creek Reach 1 (was Mugu Lagoon)

Dieldrin

Water Body	Calleguas Creek Reach 1 (was Mugu Lagoon)
Stressor/Media/Beneficial Use	Dieldrin/Tissue/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	MTRLs are not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRLs are not applicable to Aquatic Life.
Water Body-specific Information	Data is 8 years old, data measured in the waterbody, species present, one time sample event.
Data used to assess water quality	1 tissue sample, 1 sample exceeding.
Spatial representation	Sample was collected spatially.
Temporal representation	One time sample event.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides, stormwater runoff, and aerial deposition from urban and agricultural area.
Alternative Enforceable Program	
RWQCB Recommendation	Exclude from listing. Listing was based on obsolete data.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if data exceeds standard.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be inadequate. 2. Beneficial uses have been established and apply to the water body. 3. The evaluation guideline used to interpret narrative water quality standards is inadequate. MTRLs are not associated with protection of Aquatic Life beneficial uses. 4. Data are numerical. 5. Standard methods were used. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>An inadequate amount of water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is extremely low.</p>

Region 4: Calleguas Creek Reach 1 (was Mugu Lagoon)

Dacthal

Water Body	Calleguas Creek Reach 1 (was Mugu Lagoon)
Stressor/Media/Beneficial Use	Dacthal/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Guideline for Dacthal in tissue is not available; therefore, there is not a linkage to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Guidelines for Dacthal in tissue are not available.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides, stormwater runoff, and aerial deposition from urban and agricultural area.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there are no approved guidelines for Dacthal in tissue.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because there are no guidelines for Dacthal and tissue samples are not linked to aquatic life protection.

Region 4: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was pa + Fecal Coliform

Water Body	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Creek Reach 2 and 3, and lower Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO numerical, exceedances in 200-400 MPN/ml are applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	24 bacterial samples, 11 samples exceeding at 400 MPN, Geomean 431 exceed 200 MPN.
Spatial representation	2 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was pa + Nitrite as Nitrogen

Water Body	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Creek Reach 2 and 3, and lower Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrite as Nitrogen/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	NPDES Program and Calleguas Creek Ambient Water Quality Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Nitrite as Nitrogen WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQO exceedances of 1.0 ppm are applicable to Groundwater Recharge.
Water Body-specific Information	Data 2-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	42 water samples, 5 samples exceeding.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	NPDES Program and Calleguas Creek Ambient Water Quality Monitoring Program methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of nitrite as nitrogen objective as stated in Basin Plan.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other site-specific information including the effects of season, and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. Staff confidence that standards were exceeded is low.</p>

Region 4: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was pa + Organic Enrichment-Low Dissolved Oxygen

Water Body	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Creek Reach 2 and 3, and lower Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life (warm water habitat)
Data quality assessment. Extent to which data quality requirements met.	NPDES Program and Calleguas Creek Ambient Water Quality Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO for Dissolved Oxygen between 5-7 ppm is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	81 water samples, 3 samples exceeding.
Spatial representation	Unknown.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	NPDES Program and Calleguas Creek Ambient Water Quality Monitoring Program methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the Basin Plan objective for dissolved oxygen (5 - 7 ppm) was met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, storm events, and age of the data were considered.

Region 4: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was pa + Organic Enrichment-Low Dissolved Oxygen

Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.

Region 4: Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was pa + Chloride

Water Body	Calleguas Creek Reach 10 (Conejo Creek (Hill Canyon)-was part of Conejo Creek Reach 2 and 3, and lower Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chloride/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	NPDES report and Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Chloride WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	97 water samples, 16 samples exceeding.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	NPDES and Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 11 (Arroyo Santa Rosa-was part of Con + Organic Enrichment-Low Dissolved Oxygen)

Water Body	Calleguas Creek Reach 11 (Arroyo Santa Rosa-was part of Conejo Creek Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life (warm water habitat)
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	41 water samples, 0 samples exceeding.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the Basin Plan objective for dissolved oxygen was met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Calleguas Creek Reach 11 (Arroyo Santa Rosa-was part of Con + Fecal Coliform)

Water Body	Calleguas Creek Reach 11 (Arroyo Santa Rosa-was part of Conejo Creek Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO exceeding 200-400 MPN/ml is applicable.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 water samples, Geomean of 393 exceeds 200 MPN, 6 samples exceeding the 400 MPN.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 7. Standard methods were used. 8. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo No + Organic Enrichment-Low Dissolved Oxygen

Water Body	Calleguas Creek Reach 12 (was Conejo Creek/Arroyo Conejo North Fork on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NPDES monitoring.
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Aquatic Life.
Water Body-specific Information	Date = 2 - 5 years old, collected at site(s) during all seasons for 3 years.
Data used to assess water quality	83 water samples, 5 (6%) samples exceeding.
Spatial representation	One site.
Temporal representation	Collected from 7/1997 - 12/2000, throughout the 3 years
Data type	Numerical data.
Use of standard method	NPDES and TMDL methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there was not enough samples exceeding the Dissolved Oxygen WQO.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Calleguas Creek Reach 13 - Conejo Creek (South Fork)-was Co + Chloride

Water Body	Calleguas Creek Reach 13 - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chloride/Water/ Agriculture
Data quality assessment. Extent to which data quality requirements met.	NPDES Reports.
Linkage between measurement endpoint and beneficial use or standard	Chloride WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO exceedances of 150 mg/L is applicable.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	19 water samples, 17 samples exceeding.
Spatial representation	2 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	NPDES methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances in the WQO for Chloride.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 13 - Conejo Creek (South Fork)-was Co + Organic Enrichment-Low Dissolved Oxygen

Water Body	Calleguas Creek Reach 13 - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NPDES.
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data = 2 - 5 years old, collected at site, sampled all seasons.
Data used to assess water quality	83 water samples, 5 samples exceeding.
Spatial representation	Unknown.
Temporal representation	Samples were collected 7/1997 -1 2/2000.
Data type	Numerical data.
Use of standard method	NPDES and TMDL methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there are not enough samples exceeding the water quality objective for dissolved oxygen.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements did not exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Calleguas Creek Reach 2 (area affected is at the mouth)

Fecal Coliform

Water Body	Calleguas Creek Reach 2 (area affected is at the mouth)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Numerical WQO is applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	34 bacterial samples, Geomean of 934 exceeds 200 MPN standard, 24 samples exceeding at 400 MPN.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleg + Dissolved Copper

Water Body	Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list)
Stressor/Media/Beneficial Use	Dissolved Copper/Water Column/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study.
Linkage between measurement endpoint and beneficial use or standard	Dissolved copper CTR (saltwater) criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Dissolved Copper CTRs acute and chronic criteria is applicable to Aquatic Life.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	11 water samples, 7 samples exceeding for 4 days and 3 sample exceeding for 1 hour salt water standard.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter of 1998 and 1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded for acute and chronic salt water CTR criteria and the pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleg + DDT

Water Body	Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list)
Stressor/Media/Beneficial Use	DDT/Water Column/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	DDT chronic water quality criterion in the CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Chronic water quality criterion for DDT in the water column is applicable to Aquatic Life.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	11 water samples, 7 samples exceeding.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter/spring in 1998 and 1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleg + Chem A

Water Body	Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list)
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Chemical Tissue concentration based on NAS guidelines are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	Data for Chem Group A was not presented.
Data used to assess water quality	Data for Chem Group A was not presented.
Spatial representation	Data for Chem Group A was not presented.
Temporal representation	Unknown.
Data type	Numerical data.
Use of standard method	Data for Chem Group A was not presented.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Originally recommended for delisting. Reevaluation resulted in a recommendation to maintain on the list because NAS guidelines are still useful for aquatic life protection. This guideline should continue to be used until an alternative value is available.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should not be removed from the section 303(d) list because the NAS guidelines are not outdated and remain a valid assessment tools.

Region 4: Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleg + Toxicity

Water Body	Calleguas Creek Reach 2 (estuary to Potrero Road-was Calleguas Creek Reaches 1 and 2 on 1998 303(d) list)
Stressor/Media/Beneficial Use	Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Water Column Toxicity is linked to Aquatic Life. There was no toxicity recorded and a stressor was not identified.
Utility of measure for judging if standards or uses are not attained	Water Column Toxicity is applicable to Aquatic Life. There was no toxicity recorded and a stressor was not identified.
Water Body-specific Information	Data 3-4 years old, data measured at site, during summer of 1998 and 1999.
Data used to assess water quality	6 water samples, 0 mortality for toxicity test and 0 reproductive effects and/or growth inhibition.
Spatial representation	One site.
Temporal representation	Summer 1998 and 1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because results from testing one site downstream of Camrosa WWTP for chronic water column toxicity using fathead minnow and Ceriodaphnia exhibited no toxicity.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 7. Standard toxicity methods were used. 8. Other water body information including season and the age of the data were considered. <p>None of the water quality measurements exceeded the narrative objective. The staff confidence that the water quality objective were not exceeded is high.</p>

Region 4: Calleguas Creek Reach 3 (Potrero Road upstream to confluence + Chloride)

Water Body	Calleguas Creek Reach 3 (Potrero Road upstream to confluence with Conejo Creek on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chloride/Water/Ground Water Recharge and Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	USEPA has approved a TMDL for this water body-pollutant combination.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Nitrate as Nitrate)

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrate as Nitrate/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Nitrate as Nitrate WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQO is applicable Groundwater Recharge.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	43 water samples, 38 samples exceeding.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Dacthal

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Dacthal/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Dacthal measurements in sediment are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Approved Dacthal sediment guidelines do not exist.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	No data presented.
Data type	No data presented.
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there are no valid approved guidelines for Dacthal.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because approved valid guideline for Dacthal in sediment do not exist.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Chloride)

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chloride/Water/Agriculture and Groundwater Recharge.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	There are no water body specific objective applicable for this constituent.
Utility of measure for judging if standards or uses are not attained	There are no water body specific objective applicable for this constituent.
Water Body-specific Information	Data 3-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	15 water samples, however there is no water body specific objective applicable for this constituent to assess exceedances.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter/spring of 1997-1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	Calleguas Creek Chloride TMDL 2001.
RWQCB Recommendation	Do not list. There is no water body-specific objective available for this constituent.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there is not a water body specific objective for chloride in the Basin Plan.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Chem A

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Chem A NAS guidelines in tissue are Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Chem A NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Originally recommended for delisting because listing was based on NAS outdated guidelines. Reevaluation resulted in a recommendation to maintain on list because Chem A group are not outdated and are still valid guidelines set by NAS to protect aquatic life.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should not be removed from the section 303(d) list because the NAS guidelines are not outdated and remain a valid assessment tools. This guideline should continue to be used until an alternative value is available.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + TDS

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	TDS/Water/There is no water body specific WQO.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	There is no water body specific objective available for this constituent.
Utility of measure for judging if standards or uses are not attained	There is no water body specific objective available for this constituent.
Water Body-specific Information	Data 3-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	15 water sample, however there is no water body specific objective available for this constituent to assess exceedances.
Spatial representation	3 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list. There is no water body-specific objective available for this constituent.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there is not a water body specific objective for TDS in the Basin Plan.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Sulfate

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Sulfate/Water/There is no water body specific WQO.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	There is no water body specific objective available for this constituent.
Utility of measure for judging if standards or uses are not attained	There is no water body specific objective available for this constituent.
Water Body-specific Information	Data 3-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	15 water samples, however there is no water body specific quality objective for this constituent to assess exceedances.
Spatial representation	3 sites.
Temporal representation	Samples were collected from summer 98 through summer 99.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list. There is no water body-specific objective available for this constituent.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there is not a water body specific objective for chloride in the Basin Plan.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Fecal Coliform)

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Numerical WQO is applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 bacteria samples, 6 samples exceeding 400 MPN.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: M + Boron

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Boron/Water/There is no water body specific WQO.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	There is no water body specific objective applicable for this constituent.
Utility of measure for judging if standards or uses are not attained	There is no water body specific objective applicable for this constituent.
Water Body-specific Information	Data 3-4 years old, data measured at site measured during all seasons.
Data used to assess water quality	13 water samples, however there is no water body specific objective applicable for this constituent to assess for exceedances.
Spatial representation	2 sites.
Temporal representation	Summer/fall/winter/spring of 98-99.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list. There is no water body specific objective available for this constituent.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there is not a water body specific objective for Boron in the Basin Plan.

Region 4: Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mu + Dacthal

Water Body	Calleguas Creek Reach 4 (was Revolon Slough Main Branch: Mugu Lagoon to Central Avenue)
Stressor/Media/Beneficial Use	Dacthal/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	Data 5-8 years old, sample taken at site, species present, sample taken from summer during 2 years.
Data used to assess water quality	2 tissue samples, 2 samples exceeding.
Spatial representation	Samples were collected spatially.
Temporal representation	Summer 1994 and 1997.
Data type	Numerical data.
Use of standard method	TSMP Data
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not a valid assessment guideline.
SWRCB Staff Recommendation	This constituent cannot be removed from the 1998 section 303(d) list because dacthal was not listed for tissue. The 1998 listing was for sediment concentrations of dacthal.

Region 4: Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and + Nitrate as Nitrate (NO3))

Water Body	Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrate as Nitrate (NO3)/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	NPDES Reports
Linkage between measurement endpoint and beneficial use or standard	Nitrate as Nitrate (NO3) WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Groundwater Recharge.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 water samples, 8 sample exceeding.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	NPDES methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and + Fecal Coliform

Water Body	Calleguas Creek Reach 6 (was Arroyo Las Posas Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQOs is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 bacterial samples, 4 samples exceeding, Geomean of 557 exceed 200 MPN and 4 samples exceed 400 MPN.
Spatial representation	1 site.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on t + Selenium

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Selenium/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are no longer a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on t + Organophosphates

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Organophosphates/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Toxicity, chemistry and TIE/Diazinon and Ammonia are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Based on a toxicity, chemistry and TIE which are applicable to Aquatic Life.
Water Body-specific Information	Age of data 4 years, collected at site.
Data used to assess water quality	22 water sample, 1998-99 toxicity was documented. Subsequent chemistry and TIEs identified ammonia, chlorpyrifos and diazinon.
Spatial representation	Site 1 (8 samples, 2 species) upstream from POTW, Site 3 (8 samples, 2 species) downstream from POTW at Hwy 118, Site 2 (6 samples, 2 species) immediately downstream from POTW.
Temporal representation	Monthly sampling from 8/1998 to 6/1999.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Agriculture, POTWs, Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List because water column toxicity which affects aquatic life beneficial use.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and the pollutants identified in the TIE contribute to or cause the problem.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on t + Nickel

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reach 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nickel/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are no longer a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on + Zinc

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Zinc/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	Data 4-9 years old, Environmental data measured at site/waterbody, species/indicators present.
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are no longer a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on + Chromium

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chromium/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are no longer a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on + Silver

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Silver/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	Data was not presented.
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs is no longer a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on + Fecal Coliform

Water Body	Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	24 bacteria samples, 17 samples exceeding the 400 MPN standard, Geomean of 909 exceed 200 MPN.
Spatial representation	2 sites.
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek R + Toxicity)

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Water column toxicity is linked to aquatic life however the stressor is not considered a pollutant.
Utility of measure for judging if standards or uses are not attained	Water Column toxicity is applicable to aquatic life but stressor is not a pollutant.
Water Body-specific Information	Data 2-5 years old, data measured at site, during all seasons from 1997 to 2000.
Data used to assess water quality	32 water samples, number of samples exceeding the standard is low.
Spatial representation	Three sampling sites, two of which overlapped on three sample dates.
Temporal representation	All seasons from August 1997 to August 2000.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	POTWs and Agricultural Use.
Alternative Enforceable Program	
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded and the pollutant(s) potentially causing the toxicity were not identified.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body- or site-specific information including the effects of natural sources, season, and age of the data were considered. <p>Most of toxicity tests did not exceed the water quality standard. Staff confidence that standards were not exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek Re + Organic Enrichment-Low Dissolved Oxygen)

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life.
Data quality assessment. Extent to which data quality requirements met.	NPDES Monitoring
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 1-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	111 water samples, 6 sample exceeding.
Spatial representation	2 sites.
Temporal representation	Summer/fall/winter/spring (1997-2000).
Data type	Numerical data.
Use of standard method	NPDES Monitoring metadata was used.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the WQO for dissolved oxygen was met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek Re + Nitrite as Nitrogen)

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrite as Nitrogen/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	NPDES Report.
Linkage between measurement endpoint and beneficial use or standard	Nitrite as Nitrogen WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Groundwater Recharge.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	110 water samples, 18 samples exceeding.
Spatial representation	1 site only (Conejo Creek).
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	Currently in a TMDL.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek Re + Nitrate as Nitrate (NO3))

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrate as Nitrate (NO3)/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Nitrate as Nitrate (NO3) WQOs are linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Groundwater Recharge.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 water samples, 6 samples exceeding.
Spatial representation	1 site only (Conejo Creek).
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	Currently in a TMDL.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek Re + Nitrate as Nitrogen)

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Nitrate as Nitrogen/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	NPDES Reports
Linkage between measurement endpoint and beneficial use or standard	Nitrate as Nitrogen WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Groundwater Recharge.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	111 water samples, 15 sample exceeding.
Spatial representation	1 site only (Conejo Creek).
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A (was lower part of Conejo Creek Re + Fecal Coliform

Water Body	Calleguas Creek Reach 9A (was lower part of Conejo Creek Reach 1 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 3-4 years old, data measured at site, measured during all seasons.
Data used to assess water quality	12 bacteria samples, 5 samples exceeding sample exceed 400 MPN and the Geomean of 206 exceeds 200.
Spatial representation	1 site (small Reach).
Temporal representation	Summer/fall/winter/spring.
Data type	Numerical data.
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects season, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Co + Dieldrin

Water Body	Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Dieldrin/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	TSMP-QAPP
Linkage between measurement endpoint and beneficial use or standard	Dieldrin MTRLs are linked to COMM.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to COMM.
Water Body-specific Information	Data 4 years old, measured at site, species present, one-time sampling.
Data used to assess water quality	2 tissue samples, 2 samples exceeding.
Spatial representation	Sample was collected spatially.
Temporal representation	One-time sample.
Data type	Numerical data.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of MTRLs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and insufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Water body information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Co + PCBs

Water Body	Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	PCBs/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	PCB MTRLs are linked to COMM.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to COMM.
Water Body-specific Information	Data 4 years old, measured at site, one-time sampling.
Data used to assess water quality	2 composite tissue samples, 2 samples exceeding.
Spatial representation	Sample were collected spatially.
Temporal representation	One-time sample.
Data type	Numerical data.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of MTRLs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and insufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Water body information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Co + Chlordane

Water Body	Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Chlordane/Tissue/COMM.
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Chlordane MTRLs are linked to COMM
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to COMM.
Water Body-specific Information	Data 4 years old, measured at site, species present, one-time sampling.
Data used to assess water quality	2 tissue samples, 2 samples exceeding.
Spatial representation	Sample was collected spatially.
Temporal representation	One-time sample.
Data type	Numerical data.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of MTRLs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and insufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Water body information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Co + Hexachlorocyclohexane

Water Body	Calleguas Creek Reach 9A - Conejo Creek (South Fork)-was Conejo Creek Reach 4 and part of Reach 3 on the 1998 303(d) list)
Stressor/Media/Beneficial Use	Hexachlorocyclohexane/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Hexachlorocyclohexane MTRLs are linked to COMM.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to COMM.
Water Body-specific Information	Data 4 years old, measured at site, species present, one-time sampling.
Data used to assess water quality	2 tissue samples, 2 samples exceeding.
Spatial representation	Sample was collected spatially.
Temporal representation	One-time sample.
Data type	Numerical data.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of MTRLs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and insufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Water body information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Calleguas Creek Reach 9B (was part of Conejo Creek Reaches + Organic Enrichment-Low Dissolved Oxygen

Water Body	Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2)
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NPDES Monitoring QA/QC
Linkage between measurement endpoint and beneficial use or standard	Organic Enrichment-Low Dissolved Oxygen WQO are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 2 to 5 years old.
Data used to assess water quality	83 samples, 5 samples (6%) less than 5 mg/L.
Spatial representation	One site.
Temporal representation	Sampling all seasons from 7/1997 to 11/2/2000.
Data type	TMDL monitoring methods.
Use of standard method	NPDES methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of natural sources, season, storm events and age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. Staff confidence that standards are not exceeded high.</p>

Region 4: Calleguas Creek Reach 9B (was part of Conejo Creek Reaches + Unnatural Foam and Scum

Water Body	Calleguas Creek Reach 9B (was part of Conejo Creek Reaches 1 and 2)
Stressor/Media/Beneficial Use	Unnatural Foam and Scum/Water/REC-1, REC-2 and Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study and DFG
Linkage between measurement endpoint and beneficial use or standard	Unnatural Foam and Scum is linked to REC-2 , however listing is based on photograph documentation.
Utility of measure for judging if standards or uses are not attained	Use of measure is limited (based on photographs).
Water Body-specific Information	Narrative information including photographs. Water samples were not collected.
Data used to assess water quality	One photograph.
Spatial representation	One photograph.
Temporal representation	21-Apr-01.
Data type	Non numerical information (One Photograph).
Use of standard method	Calleguas Creek Characterization Study methods.
Potential Source(s) of Pollutant	Agriculture and Natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to non-attainment of the narrative objective for floating and settleable materials objective in the Basin Plan.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if a pollutant contributes or causes any standards exceedance. The cause of the foam and scum may be nutrient enrichment but such pollutants have not been identified.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data exhibited insufficient spatial and temporal coverage. 2. The evaluation guideline used to interpret narrative water quality standards is inadequate. 3. Data are not numerical, based on one photograph. 4. Non-standard methods were used. 5. No water quality measurements were submitted. <p>Staff confidence that standards were exceeded is extremely low.</p>

Region 4: Calleguas Creek Watershed (Reaches 1-8, 11)

Sedimentation

Water Body	Calleguas Creek Watershed (Reaches 1-8, 11)
Stressor/Media/Beneficial Use	Sedimentation/Sediment/Aquatic Life.
Data quality assessment. Extent to which data quality requirements met.	Calleguas Creek Characterization Study/DFG Bioassessment.
Linkage between measurement endpoint and beneficial use or standard	Macroinvertebrate and Bioassessment are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	DFG guidelines for macroinvertebrate and bioassessment are applicable to Aquatic Life.
Water Body-specific Information	Data 3-8 years old, data measured at site, species present.
Data used to assess water quality	Bioassessment.
Spatial representation	Some sites listed.
Temporal representation	Unknown.
Data type	Non-numerical data.
Use of standard method	DFG methods.
Potential Source(s) of Pollutant	Agriculture and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to excessive sedimentation.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because sedimentation contributes to or causes the problem. Listing was based on a 1998 DFG bioassessment report.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The information provided in the report is considered adequate. 2. Beneficial uses apply to the water body. 3. The bioassessment evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are not numerical. 5. Standard bioassessment methods were used. 6. Other site-specific information including the effects of natural sources, season, storm events, and age of the data were considered. <p>An adequate amount of biological measurements exceeded the bioassessment guidelines. Staff confidence that standards were exceeded is moderate.</p>

Region 4: Canada Larga

Fecal Coliform

Water Body	Canada Larga
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Unknown.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data is 1-3 year old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	Fecal Coliform (9 bacteria samples, 1 sample exceeding), E. coli (10 bacteria samples, 3 samples exceeding), Combined (19 bacteria samples, 4 samples exceeding).
Spatial representation	Unknown.
Temporal representation	Different seasons and years.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Horse stables, land use, cattle, wildlife.
Alternative Enforceable Program	
RWQCB Recommendation	List due to greater than 10% exceedance of the fecal coliform objective.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Canada Larga

Dissolved Oxygen

Water Body	Canada Larga
Stressor/Media/Beneficial Use	Dissolved Oxygen/Water/Aquatic Life (warm-cold water and wildlife habitat, spawning, reproduction and migration)
Data quality assessment. Extent to which data quality requirements met.	Ojai Valley River Volunteer Monitoring Program.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO exceedance below 5 mg/L for Dissolved Oxygen is applicable to Aquatic Life.
Water Body-specific Information	Data is 1-3 year old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	21 water samples, 5 samples exceeding.
Spatial representation	2 stations.
Temporal representation	Collected during all seasons.
Data type	Numerical data.
Use of standard method	Ojai Valley River Volunteer Monitoring Program methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to greater than 10% exceedance of the instantaneous dissolved oxygen objective.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Castlerock Beach

Bacterial Indicators

Water Body	Castlerock Beach
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards which is applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	17 samples, 13 samples exceeding.
Spatial representation	1 station: ID99999. This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Channel Islands Harbor - Beach Park at the end of Rocks

Bacterial Indicators

Water Body	Channel Islands Harbor - Beach Park at the end of Rocks
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	33 samples, 2 samples exceeding.
Spatial representation	1 station: VC(37000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Channel Islands Harbor-Beach Park at S. end of Victoria Ave + Bacterial Indicators

Water Body	Channel Islands Harbor-Beach Park at S. end of Victoria Avenue
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	99 samples, 54 samples exceeding.
Spatial representation	1 station: VC(37000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Cold Creek Algae

Water Body	Cold Creek
Stressor/Media/Beneficial Use	Algae/Water/REC-1 and REC-2, Aquatic Life (spawning, rare and endangered species, warm and cold, wildlife freshwater habitat)
Data quality assessment. Extent to which data quality requirements met.	QA/QC unknown data generated by Heal the Bay monitoring program.
Linkage between measurement endpoint and beneficial use or standard	Excessive Algae growth is linked to REC-1 and REC-2, however Aquatic Life linkage is not clear.
Utility of measure for judging if standards or uses are not attained	New Zealand Periphyton Guideline (Biggs, 2000) applicability uncertain.
Water Body-specific Information	Data 1-4 years old, data measured at site, species present, measured during fall and spring in 2 years.
Data used to assess water quality	43 samples, 8 samples exceed the 30% algae cover based on Biggs, New Zealand Periphyton Guideline (2000). No pollutant was identified.
Spatial representation	2 sites.
Temporal representation	Fall and spring in two years.
Data type	Numerical data.
Use of standard method	Heal the Bay (Citizens Monitoring) methods.
Potential Source(s) of Pollutant	Nonpoint sources from septic tanks and livestock.
Alternative Enforceable Program	
RWQCB Recommendation	List due to observations of excessive algal growth-greater than 30% coverage, based on Biggs (2000).
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List. The Basin Plan Water Quality Objective for floating material may be exceeded but habitat features or the biostimulatory substance contributing or causing such algae growth has not been identified.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality for REC-2 impact determinations. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Non-standard methods were used. 8. Other water body- or site-specific information including the age of the data were considered.

Region 4: Cold Creek

Algae

An adequate number of algae coverage measurements exceed the REC-2 Basin Plan Water Quality Objective for Floating Materials. The staff confidence that standards were exceeded is moderate. However, the pollutant causing the algae growth has not been identified.

Region 4: Colorado Lagoon Lead

Water Body	Colorado Lagoon
Stressor/Media/Beneficial Use	Lead/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Not applicable
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	Unknown.
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because listing was based on EDLs which not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret water quality standards.

Region 4: Compton Creek

Trash

Water Body	Compton Creek
Stressor/Media/Beneficial Use	Trash/Water/REC-1, REC-2 , and Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Quality assurance information was not provided.
Linkage between measurement endpoint and beneficial use or standard	Trash is linked to REC-1, REC-2 and Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Photographs can indicate gross impacts on beneficial uses and whether standards have been exceeded. Measurements of the amount of trash collected can provide a relative measure of the potential for nuisance.
Water Body-specific Information	Photographs of the condition on the Creek were provided. The photographs were taken at the Creek on 9/21/2002, three weeks after the creek channel was cleaned out by heavy equipment for flood control purposes. Data on the collection of trash and debris were also submitted.
Data used to assess water quality	1650 pounds of trash and debris were collected from volunteers over a 4 hour period in 2002. After the cleanup of the small section of the Creek, trash was still present that could have affected habitat and impeded flows.
Spatial representation	Along 75 yards of the Creek.
Temporal representation	One 4 hour period in 2002.
Data type	Numerical and Non-numerical.
Use of standard method	Unknown
Potential Source(s) of Pollutant	Probably storm water discharge.
Alternative Enforceable Program	
RWQCB Recommendation	No recommendation was made by the RWQCB.
SWRCB Staff Recommendation	<p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine whether applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of unknown quality. 2. The data exhibited insufficient spatial and temporal coverage. <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Coyote Creek

Ammonia

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	There was no new data assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	No new data were submitted which indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: Coyote Creek Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: Coyote Creek

Dissolved Copper

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Dissolved Copper/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Dissolved Copper CTR criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR criterion is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	26 water samples, 16 samples exceeding.
Spatial representation	1 site.
Temporal representation	Fall, winter, spring (1997-2000).
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to greater than 10% exceedance of the WQO and CTR.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical, not numerical, both numerical . 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Coyote Creek Toxicity

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data submitted in the 2000 NPDES Annual Monitoring Reports of the Long Beach and Valencia Water Reclamation Plants.
Linkage between measurement endpoint and beneficial use or standard	Toxicity is linked to Aquatic Life, however the stressor was not confirmed.
Utility of measure for judging if standards or uses are not attained	Toxicity is applicable to Aquatic Life, however the stressor was not confirmed.
Water Body-specific Information	Receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000.
Data used to assess water quality	Chronic toxicity has been detected at receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000 and downstream of the Valencia WRP on the Santa Clara River during 2000. Toxicity identification evaluations have been performed using zeolite filtration to control ammonia toxicity. The test results indicated ammonia was likely the principal cause of toxicity.
Spatial representation	Receiving water stations downstream of the Long Beach WRP on Coyote Creek and downstream of the Valencia WRP on the Santa Clara River.
Temporal representation	Toxicity identification evaluation completed: 1999-2000.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs.</p>
RWQCB Recommendation	None.

Region 4: Coyote Creek Toxicity

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: Coyote Creek

Dissolved Lead

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Dissolved Lead/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Department of Public Works
Linkage between measurement endpoint and beneficial use or standard	Dissolved Lead CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	26 water samples, 18 samples exceeding.
Spatial representation	1 site (S 13).
Temporal representation	Fall, winter, spring (1997-1999).
Data type	Numerical data.
Use of standard method	Los Angeles County Department of Public Works methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of the dissolved chronic criterion.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Coyote Creek

Dissolved Zinc

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Dissolved Zinc/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Dissolved Zinc CTR criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR criterion is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	26 water samples, 6 samples exceeding.
Spatial representation	1 site (S 14).
Temporal representation	Fall, winter, spring (1997-2000).
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	.
RWQCB Recommendation	List due to exceedances of the dissolved chronic criterion.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Coyote Creek Silver

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Silver/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs and MTRLs are not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRLs and EDLs are not applicable to Aquatic Life.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because listing was based on EDL which are not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are no longer a valid as a water quality standard assessment tool. In addition, MTRLs are not linked to aquatic life beneficial uses.

Region 4: Coyote Creek

Total Selenium

Water Body	Coyote Creek
Stressor/Media/Beneficial Use	Total Selenium/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Total Selenium CTR criterion is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR criterion is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, stormwater events.
Data used to assess water quality	26 water samples, 5 samples exceeding.
Spatial representation	1 station.
Temporal representation	Fall 1997, fall 1998, winter-summer 1999.
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of the dissolved chronic criterion.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Dominguez Channel (Estuary to Vermont)

Copper

Water Body	Dominguez Channel (Estuary to Vermont)
Stressor/Media/Beneficial Use	Copper/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Copper ERM-PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to aquatic life but using these guidelines in the absence of synoptically collected toxicity data is controversial.
Water Body-specific Information	Data 7 years old, environmental data measured at site, one-time sample, one event.
Data used to assess water quality	1 sediment sample, 1 sample exceeding.
Spatial representation	One sample only.
Temporal representation	One sample event.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants for DDT, chlordane and PCBs. Stormwater runoff, aerial deposition and historical discharges for copper
Alternative Enforceable Program	BPTCP Consolidated Plan.
RWQCB Recommendation	List due to exceedances of ERM-PELs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if the applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient temporal coverage. An inadequate amount of water quality measurements were collected and analyzed.</p>

Region 4: Dominguez Channel (Estuary to Vermont)

PCBs

Water Body	Dominguez Channel (Estuary to Vermont)
Stressor/Media/Beneficial Use	PCBs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP, QAPP
Linkage between measurement endpoint and beneficial use or standard	PCB ERM-PELs are generally linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to aquatic life, however using these guidelines in the absence of synoptically collected toxicity data is controversial.
Water Body-specific Information	Data 8 years old, environmental data measured at site, one-time sample, one event.
Data used to assess water quality	1 sediment sample, 1 sample exceeding.
Spatial representation	One sample only.
Temporal representation	One sample event.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants for DDT, chlordane and PCBs. Stormwater runoff, aerial deposition and historical discharges for copper.
Alternative Enforceable Program	None.
RWQCB Recommendation	List due to exceedance in ERM-PELs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if the applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient temporal coverage. An inadequate amount of water quality measurements were collected.</p>

Region 4: Dominguez Channel (Estuary to Vermont)

Unknown pollutant

Water Body	Dominguez Channel (Estuary to Vermont)
Stressor/Media/Beneficial Use	Unknown pollutant/Sediment/Aquatic Life.
Data quality assessment. Extent to which data quality requirements met.	BPTCP, QAPP.
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sediment toxicity is applicable to Aquatic Life, however it has limited applicability because only one sediment sample was taken.
Water Body-specific Information	Data 7 years old, environmental data measured at site/waterbody, one-time sample.
Data used to assess water quality	1 sediment sample.
Spatial representation	One sample only.
Temporal representation	One sample event.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants for DDT, chlordane and PCBs. Stormwater runoff, aerial deposition and historical discharges for copper.
Alternative Enforceable Program	None.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if the applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient temporal coverage. An inadequate amount of water quality measurements exceeded the water quality standard.</p>

Region 4: Dominguez Channel (Estuary to Vermont)

Chlordane

Water Body	Dominguez Channel (Estuary to Vermont)
Stressor/Media/Beneficial Use	Chlordane/Sediment/Aquatic Life.
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Chlordane ERM-PELs are generally linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to aquatic life, however using these guidelines in the absence of synoptically collected toxicity data is controversial.
Water Body-specific Information	Data 8 years old, environmental data measured at site, one-time sample, one event.
Data used to assess water quality	1 sediment sample, 1 sample exceeding.
Spatial representation	One sample only.
Temporal representation	One sample event.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants for DDT, chlordane and PCBs. Stormwater runoff, aerial deposition and historical discharges for copper.
Alternative Enforceable Program	BPTCP Consolidated Plan.
RWQCB Recommendation	List due to exceedance in ERM-PELs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because it cannot be determined if the applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient temporal coverage. An inadequate amount of water quality measurements were collected and analyzed.</p>

Region 4: Dry Canyon Creek

Total Selenium

Water Body	Dry Canyon Creek
Stressor/Media/Beneficial Use	Total Selenium/Water/Aquatic Life (warm freshwater and wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	City of Calabasas
Linkage between measurement endpoint and beneficial use or standard	Total Selenium CTRs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 1-2 years, data measured at site, multiple event in different seasons.
Data used to assess water quality	32 water samples, 9 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Fall, winter, spring in different years (2000 - 2001).
Data type	Numerical data.
Use of standard method	City of Calabasas methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other site-specific information including the effects of season, storm events, and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Dry Canyon Creek

Fecal Coliform

Water Body	Dry Canyon Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	City of Calabasas
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 1-2 years, data measured at site, seasonality and years.
Data used to assess water quality	56 samples, 11 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Fall, winter, spring in different years (2000-2001).
Data type	Numerical data.
Use of standard method	City of Calabasas methods.
Potential Source(s) of Pollutant	Natural and urban sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other site-specific information including the effects of season, storm events, and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Duck Pond Ag Drain/Mugu Drain/Oxnard Drain #2 Chem A

Water Body	Duck Pond Ag Drain/Mugu Drain/Oxnard Drain #2
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life.
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Tissue NAS guidelines are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Tissue NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Originally recommended for delisting because listing was based on NAS outdated guidelines. Reevaluation resulted in a recommendation to maintain the listing because Chem A group are not outdated and are still valid guidelines set by NAS to protect aquatic life.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should not be removed from the section 303(d) list because applicable NAS guidelines are not outdated, and are a valid assessment guideline.

Region 4: Echo Park Lake Trash

Water Body	Echo Park Lake
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life, REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Hobie Beach (Channel Islands Harbor)

Bacterial Indicators

Water Body	Hobie Beach (Channel Islands Harbor)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County health department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	49 samples exceeding standards out of 97 samples.
Spatial representation	1 station: VC(36000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Hopper Creek (tributary to Santa Clara River Reach 4) TDS

Water Body	Hopper Creek (tributary to Santa Clara River Reach 4)
Stressor/Media/Beneficial Use	TDS/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	TDS WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO and measurement end points are applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	11 water samples, 10 samples exceeding.
Spatial representation	Limited.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the of age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Hopper Creek (tributary to Santa Clara River Reach 4) Sulfate

Water Body	Hopper Creek (tributary to Santa Clara River Reach 4)
Stressor/Media/Beneficial Use	Sulfate/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	Sulfate WQO are linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO and measurement end points are applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	12 water samples, 11 sample exceeding.
Spatial representation	Limited.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the of age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Lake Calabazas

Copper

Water Body	Lake Calabazas
Stressor/Media/Beneficial Use	Copper/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on EDLs which not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Lake Calabazas

Zinc

Water Body	Lake Calabazas
Stressor/Media/Beneficial Use	Zinc/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because original listing was based on EDLs which not a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Lake Lindero

Selenium

Water Body	Lake Lindero
Stressor/Media/Beneficial Use	Selenium/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Median International Standards (MIS) are not linked to Aquatic life. These criteria were published by the UN as a survey of member nations health protection criteria. They are not applicable with the U.S.A.
Utility of measure for judging if standards or uses are not attained	MIS are outdated guidelines and were never applicable to Aquatic Life protection.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on MIS for trace elements, which are outdated and are not valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applied Median International Standards (MIS) are obsolete, not applicable within the U.S.A. and do not represent valid assessment guidelines to measure impacts on aquatic life beneficial uses.

Region 4: Lincoln Park Lake

Trash

Water Body	Lincoln Park Lake
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles Fish Harbor

TBT

Water Body	Los Angeles Fish Harbor
Stressor/Media/Beneficial Use	TBT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	TBT in sediment is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Assessment based on background levels rather than valid assessment guidelines which are not applicable to Aquatic Life.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants. Stormwater runoff, aerial deposition, and historical discharges of metal.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on exceeding background levels rather than valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.

Region 4: Los Angeles Harbor Inner Breakwater TBT

Water Body	Los Angeles Harbor Inner Breakwater
Stressor/Media/Beneficial Use	TBT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP-QAPP
Linkage between measurement endpoint and beneficial use or standard	TBT in sediment is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Assessment based on background levels rather than valid assessment guideline which is not applicable to Aquatic Life.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants. Stormwater runoff, aerial deposition, and historical discharges of metal.
Alternative Enforceable Program	
RWQCB Recommendation	Delist the original listing was based on exceeding background levels rather than valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.

Region 4: Los Angeles Harbor Main Channel

TBT

Water Body	Los Angeles Harbor Main Channel
Stressor/Media/Beneficial Use	TBT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	TBT in sediment is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Assessment based on background levels rather than valid assessment guideline which is not applicable to Aquatic Life.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants. Stormwater runoff, aerial deposition, and historical discharges of metal
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on exceeding background levels rather than valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.

Region 4: Los Angeles Harbor-Consolidated Slip Toxaphene

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Toxaphene/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	SMWP
Linkage between measurement endpoint and beneficial use or standard	Toxaphene MTRLs are linked to COMM.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to COMM.
Water Body-specific Information	Data 4-9 years old, environmental data measured at site/waterbody, species present, samples collected in 1993, 1995, 1997 and 1998.
Data used to assess water quality	4 tissue samples (67%) exceeded the water quality standard. The RWQCB provided the adequate data that was inadvertently missing in their original fact sheet.
Spatial representation	Unknown.
Temporal representation	Samples were collected in 1993, 1995, 1997 and 1998.
Data type	Numerical.
Use of standard method	SMWP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	BPTCP Consolidated Cleanup Plan.
RWQCB Recommendation	List due to exceedances in MTRLs.
SWRCB Staff Recommendation	<p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. The RWQCB provided the appropriate data, that was inadvertently missing in their original fact sheet, to support the listing of this water body-pollutant combination.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered.

Region 4: Los Angeles Harbor-Consolidated Slip Toxaphene

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Los Angeles Harbor-Consolidated Slip Cadmium

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Cadmium/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Benthic community effects, sediment toxicity, and ERM-PEL is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Effects data, toxicity data, and ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 6 years old, one-time sample event, one season event.
Data used to assess water quality	14 sediment sample, 6 samples exceeding for Cadmium. Eight associated sediment samples had significant toxicity and four sediment stations had a degraded benthic community.
Spatial representation	Samples were collected spatially.
Temporal representation	One-time sample.
Data type	Numerical data.
Use of standard method	BPTCP methods were used.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan describes how the Los Angeles Contaminated Task Force will develop a plan for the cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.
RWQCB Recommendation	List due to exceedances of ERM/PEL sediment thresholds.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used.

Region 4: Los Angeles Harbor-Consolidated Slip Cadmium

An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Los Angeles Harbor-Consolidated Slip Copper

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Copper/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Benthic community effects, sediment toxicity, and ERM-PEL is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Effects data, toxicity data, and ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 6-10 years old, environmental data measured at site/waterbody.
Data used to assess water quality	19 sediment samples, 19 samples exceeding ERM-PELs for Copper. Eight associated sediment samples had significant toxicity and four sediment stations had a degraded benthic community.
Spatial representation	Samples were collected spatially.
Temporal representation	3 different year and seasons.
Data type	Numerical data.
Use of standard method	BPTCP methods were used.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan describes how the Los Angeles Contaminated Task Force will develop a plan for the cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.
RWQCB Recommendation	List due to exceedances in ERM/PEL sediment thresholds.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used.

Region 4: Los Angeles Harbor-Consolidated Slip Copper

An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Los Angeles Harbor-Consolidated Slip Dieldrin

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Dieldrin/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	SMWP
Linkage between measurement endpoint and beneficial use or standard	Dieldrin MTRLs are linked to COMM.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to COMM.
Water Body-specific Information	Data 7-9 years old, environmental data measured at site/waterbody, samples collected during 2 different seasons and years.
Data used to assess water quality	3 tissue samples, 3 samples exceeding.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples were collected temporally.
Data type	Numerical data.
Use of standard method	SMWP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedance in MTRLs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate, quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles Harbor-Consolidated Slip Zinc

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Zinc/Tissue
Data quality assessment. Extent to which data quality requirements met.	SMWP
Linkage between measurement endpoint and beneficial use or standard	There is not a linkage to beneficial use.
Utility of measure for judging if standards or uses are not attained	Assessment based on background levels rather than valid assessment guideline which is not applicable to aquatic life.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples were collected temporally.
Data type	Numerical.
Use of standard method	SMWP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on exceeding background levels rather than valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.

Region 4: Los Angeles Harbor-Consolidated Slip TBT

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	TBT/Tissue/COMM
Data quality assessment. Extent to which data quality requirements met.	SMWP
Linkage between measurement endpoint and beneficial use or standard	SMWP data is linked to COMM.
Utility of measure for judging if standards or uses are not attained	Assessment based on background levels rather than valid assessment guideline which is not applicable to COMM.
Water Body-specific Information	Unknown.
Data used to assess water quality	Unknown.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples were collected temporally.
Data type	Numerical data.
Use of standard method	SMWP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	BPTCP Consolidated Cleanup Plan.
RWQCB Recommendation	Delist because the original listing was based on exceeding background levels rather than valid assessment of guidelines. Delisting applies to LA Harbor Consolidated Slip, Fish Harbor, Inner Breakwater and Main Channel).
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the original listing was based on exceeding background levels rather than valid assessment guidelines.

Region 4: Los Angeles Harbor-Consolidated Slip Arsenic

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Arsenic/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Arsenic ERM-PELs are linked Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Numerical data.
Use of standard method	BPTCP and SMWP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	BPTCP Consolidated Cleanup Plan.
RWQCB Recommendation	Inadvertently listed. Reevaluation of data revealed that arsenic did not exceed ERM or PEL sediment thresholds.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because the water body was inadvertently listed and applicable sediment thresholds are not exceeded.

Region 4: Los Angeles Harbor-Consolidated Slip Nickel

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Nickel/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Benthic community effects, sediment toxicity, and ERM-PEL is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Effects data, toxicity data, and ERM-PELs are applicable to aquatic life beneficial uses. There were 5 samples exceeding in the PEL guideline for nickel, however ERMs were not exceeded. Toxicity and sediment chemistry data was collected synoptically.
Water Body-specific Information	Data 8-10 years old, environmental data measured at site/waterbody, 2 seasons monitored in 2 different years.
Data used to assess water quality	5 sediment chemistry samples, 5 samples exceeding. Sediment toxicity data was observed in synoptically collected samples. Nickel is not identified in the Consolidated Toxic Hot Spots Cleanup Plan as a chemical contributing to the creation or maintenance of the toxic hot spot.
Spatial representation	Samples were collected spatially.
Temporal representation	3 different year (1992 and 1994) and seasons
Data type	Numerical data.
Use of standard method	BPTCP methods were used.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	None.
RWQCB Recommendation	List due to exceedance of ERM/PEL sediment thresholds.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard were used.

Region 4: Los Angeles Harbor-Consolidated Slip Nickel

8. Other water body- or site-specific information including the effects of season and age of the data were considered.

All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Los Angeles Harbor-Consolidated Slip

Mercury

Water Body	Los Angeles Harbor-Consolidated Slip
Stressor/Media/Beneficial Use	Mercury/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Benthic community effects, sediment toxicity, and ERM-PEL is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Effects data, toxicity data, and ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 6-10 years old, environmental data measured at site/waterbody, 3 years-3 seasons.
Data used to assess water quality	19 sediment samples, 5 samples exceeding ERM-PEL for Mercury. Eight associated sediment samples had significant toxicity and four sediment stations had a degraded benthic community.
Spatial representation	Samples were collected spatially.
Temporal representation	3 different year and seasons.
Data type	Numerical data.
Use of standard method	BPTCP methods were used.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff, aerial deposition, and historical discharges for metals.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan describes how the Los Angeles Contaminated Task Force will develop a plan for the cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.
RWQCB Recommendation	List due to exceedance of ERM/PEL sediment thresholds.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used. <p>An adequate amount of the water quality measurements exceeded the water</p>

Region 4: Los Angeles Harbor-Consolidated Slip Mercury

quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Los Angeles River Estuary (Queensway Bay)

DDT

Water Body	Los Angeles River Estuary (Queensway Bay)
Stressor/Media/Beneficial Use	DDT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	DDT ERM-PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-10 years old, data measured at site, data measured in different years.
Data used to assess water quality	9 samples, 6 samples exceeding. Four out of six sediment samples were found to be significantly toxic to amphipods. The benthic community was classified as transitional.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples taken in 2 different years.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedance in ERM/PELs guidelines.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles River Estuary (Queensway Bay)

Chlordane

Water Body	Los Angeles River Estuary (Queensway Bay)
Stressor/Media/Beneficial Use	Chlordane/sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Chlordane ERM-PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-10 years old, data measured at site, data measured in different years.
Data used to assess water quality	9 sediment samples, 9 samples exceeding. Four out of six sediment samples were found to be significantly toxic to amphipods. The benthic community was classified as transitional.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples taken in 2 different years.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances in ERM/PELs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles River Estuary (Queensway Bay)

Lead

Water Body	Los Angeles River Estuary (Queensway Bay)
Stressor/Media/Beneficial Use	Lead/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Lead ERM/PELs in sediment are linked to Aquatic Life .
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-10 years old, data measured at site, data measured in different years.
Data used to assess water quality	18 sediment samples, 8 samples exceeding. Four out of six sediment samples were found to be significantly toxic to amphipods. The benthic community was classified as transitional.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples collected in 2 different years.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances in ERM/PEL assessment guidelines.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles River Estuary (Queensway Bay)

Zinc

Water Body	Los Angeles River Estuary (Queensway Bay)
Stressor/Media/Beneficial Use	Zinc/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Zinc ERM-PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 1-5 years old, measured at site during three different years.
Data used to assess water quality	27 samples, 5 samples exceeding. Four out of six sediment samples were found to be significantly toxic to amphipods. The benthic community was classified as transitional.
Spatial representation	Samples collected spatially.
Temporal representation	Samples collected during three different years.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances in ERM-PEL guidelines.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 7. Water quality standard used is applicable. 8. The evaluation guideline used to interpret narrative water quality standards is adequate. 9. Data are numerical. 7. Standard methods were used. 8. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles River Estuary (Queensway Bay)

PCBs

Water Body	Los Angeles River Estuary (Queensway Bay)
Stressor/Media/Beneficial Use	PCBs/sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	PCBs ERM/PELs in sediment is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-10 years old, data measured at site, data measured in different years.
Data used to assess water quality	18 samples, 2 samples exceeding. Four out of six sediment samples were found to be significantly toxic to amphipods. The benthic community was classified as transitional.
Spatial representation	Samples were collected spatially.
Temporal representation	Samples taken in 2 different years.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of ERM-PELs sediment quality guideline.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)

Dissolved Cadmium

Water Body	Los Angeles River Reach 1 (Estuary to Carson Street)
Stressor/Media/Beneficial Use	Dissolved Cadmium/Water/Aquatic Life (Warm, Wildlife Habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program
Linkage between measurement endpoint and beneficial use or standard	Cadmium CTR criterion is linked to Aquatic Life and Drinking Water standard CA Code title 22.
Utility of measure for judging if standards or uses are not attained	CTR criterion is applicable to Aquatic Life.
Water Body-specific Information	Data 3-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	18 water samples, 4 samples exceeding (acute), 6 samples exceeding (chronic), 2 samples exceeding (CTR Title 22).
Spatial representation	Samples were collected mostly in main stem of Los Angeles River.
Temporal representation	Fall, winter, fall, spring (1997-1999).
Data type	Numerical data.
Use of standard method	LA County Stormwater Monitoring Program.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of dissolved and total cadmium water quality criteria for protection of freshwater aquatic life and potential drinking water sources.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other site-specific information including the effects of season, storm events, and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)

Dissolved Copper

Water Body	Los Angeles River Reach 1 (Estuary to Carson Street)
Stressor/Media/Beneficial Use	Dissolved Copper/ Water/Aquatic Life (warm-freshwater and wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program
Linkage between measurement endpoint and beneficial use or standard	Copper CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	18 water samples, 11 samples exceeding (acute), 13 samples exceeding (chronic).
Spatial representation	Samples were collected mostly in main stem of Los Angeles River.
Temporal representation	Fall, winter, spring (1997-1999).
Data type	Numerical data.
Use of standard method	Los Angeles County Stormwater Program.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of dissolved copper water quality criteria for protection of freshwater aquatic life.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the effects of season, storm events, and age of the data were considered.

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)

Dissolved Copper

An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)

Dissolved Zinc

Water Body	Los Angeles River Reach 1 (Estuary to Carson Street)
Stressor/Media/Beneficial Use	Dissolved Zinc/Water/Aquatic Life (warm-freshwater and wildlife habitat)
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program
Linkage between measurement endpoint and beneficial use or standard	Zinc CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTRs are applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	18 water samples, 7 samples exceeding (acute and chronic criteria).
Spatial representation	Samples were collected mainly in the main stem of the LA River.
Temporal representation	Fall, winter in different years.
Data type	Numerical data.
Use of standard method	Los Angeles County Stormwater Monitoring Program.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of dissolved zinc acute and chronic water quality criteria for protection of freshwater Aquatic Life.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)

Trash

Water Body	Los Angeles River Reach 1 (Estuary to Carson Street)
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles River Reach 1 (Estuary to Carson Street)

Total Aluminum

Water Body	Los Angeles River Reach 1 (Estuary to Carson Street)
Stressor/Media/Beneficial Use	Total Aluminum/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Stormwater Program
Linkage between measurement endpoint and beneficial use or standard	WQO for Aluminum Maximum Concentration Levels (MCLs) are linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	MCLs are applicable to Groundwater Recharge.
Water Body-specific Information	Data is 3-5 year old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	18 water samples, 10 samples exceeding.
Spatial representation	Samples were collected mainly in the main stem of the LA River.
Temporal representation	Fall-1997, winter- fall 1998, winter 1999.
Data type	Numerical data.
Use of standard method	TSMP.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the effects of season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Los Angeles River Reach 2 (Carson to Figueroa Street)

Trash

Water Body	Los Angeles River Reach 2 (Carson to Figueroa Street)
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles River Reach 3 (Figueroa Street to Riverside Drive) + Trash

Water Body	Los Angeles River Reach 3 (Figueroa Street to Riverside Drive)
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles River Reach 4 (Sepulveda Drive to Sepulveda Dam + Trash

Water Body	Los Angeles River Reach 4 (Sepulveda Drive to Sepulveda Dam)
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles River Reach 5 (At Sepulveda Basin)

Trash

Water Body	Los Angeles River Reach 5 (At Sepulveda Basin)
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life and REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Los Angeles River Reach 5 (within Sepulveda Basin)

Chem A

Water Body	Los Angeles River Reach 5 (within Sepulveda Basin)
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	Chem A NAS guidelines are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	Data age is 10 years old.
Data used to assess water quality	1 tissue sample, 0 samples exceeding. This water body-pollutant was listed on the 1996 303 (d) list in error by the RWQCB. The Chem A in this tissue sample collected in 1992 did not exceed the NAS Chem A guideline.
Spatial representation	One site.
Temporal representation	One time sample.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because Chem A did not exceed the NAS guidelines in tissue.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because there is insufficient evidence to support listing the pollutant. The original listing was made in error by the RWQCB in 1996 . The tissue sample collected in 1992 was below the NAS tissue guideline for Chem A.</p> <p>This conclusion is based on the staff findings that the data exhibited insufficient spatial and temporal coverage.</p> <p>An adequate number of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Los Angeles River Reach 5 (within Sepulveda Basin)

Chlorpyrifos

Water Body	Los Angeles River Reach 5 (within Sepulveda Basin)
Stressor/Media/Beneficial Use	Chlorpyrifos/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable assessment guideline.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on EDLs which are not a valid assessment guideline.
SWRCB Staff Recommendation	In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Los Cerritos Channel

Chlordane

Water Body	Los Cerritos Channel
Stressor/Media/Beneficial Use	Chlordane/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Chlordane ERMs-PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERMs-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 8-9 years old, data measured at site, measured during the winter.
Data used to assess water quality	4 sediment samples, 3 samples exceeding 4 sediment toxicity test samples, 3 samples toxic
Spatial representation	Data was collected spatially.
Temporal representation	Winter 1993 and 1994.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other site-specific information including the effects of season, storm events, and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Los Cerritos Channel

Unknown

Water Body	Los Cerritos Channel
Stressor/Media/Beneficial Use	Unknown/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity is linkage to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Sediment toxicity is applicable to Aquatic Life, however guidelines use are unknown.
Water Body-specific Information	Data 9-10 years old, samples taken at site.
Data used to assess water quality	4 sediment samples, 3 toxic samples.
Spatial representation	Unknown.
Temporal representation	Samples taken in 1993 and in 1994.
Data type	Numerical data.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	List for sediment toxicity.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because sediment toxicity is a condition of a water body. Pollutants such as chlordane contribute to or cause the observed toxicity.

Region 4: Machado Lake (Harbor Park Lake)

Chem A

Water Body	Machado Lake (Harbor Park Lake)
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Chem A tissue NAS guidelines are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Numerical data.
Use of standard method	TSMP.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants.
Alternative Enforceable Program	
RWQCB Recommendation	Originally recommended for delisting because listing was based on NAS outdated guidelines. Reevaluation resulted in a recommendation to maintain on list because Chem A group are not outdated and are still valid guidelines set by NAS to protect aquatic life.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should not be removed from the section 303(d) list because applicable NAS guidelines are not outdated, and are a valid assessment guideline.

Region 4: Malibou Lake PCB

Water Body	Malibou Lake
Stressor/Media/Beneficial Use	PCB/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP.
Linkage between measurement endpoint and beneficial use or standard	PCB Tissue chemistry (MTRLs) are not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRLs are not applicable to Aquatic Life.
Water Body-specific Information	Data is 5 -10 years old, measured at site, species present, two sampling event.
Data used to assess water quality	PCBs were not detected in the two tissue samples collected 1992 and 1997. This water body was originally recommended to be removed from the section 303(d) list by the RWQCB. The SWRCB staff recommended to maintain the listing because the data was not presented to support delisting. In December 2002, the RWQCB included data to support the delisting.
Spatial representation	Two tissue samples.
Temporal representation	Samples were collected in 1992 and 1997.
Data type	Numerical data.
Use of standard method	TSMP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because PCBs in tissue were not detected in 1992 and 1997.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list. The RWQCB provided recent data to support removing this waterbody-pollutant from the 303(d) list.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Numerical data were presented. 5. Standard methods were used. <p>None of quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 4: Malibou Lake Copper

Water Body	Malibou Lake
Stressor/Media/Beneficial Use	Copper/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs are not valid assessment guidelines.
SWRCB Staff Recommendation	In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Malibou Lake

Chlordane

Water Body	Malibou Lake
Stressor/Media/Beneficial Use	Chlordane/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	MTRLs are not linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	MTRLs are not applicable to Aquatic Life.
Water Body-specific Information	Data is 5 -10 years old, measured at site, species present, two sampling event.
Data used to assess water quality	<p>2 tissue samples, 0 samples exceeding. Originally, this water body was recommended to be removed from the section 303(d) list by the RWQCB in May 2002. SWRCB staff recommended to maintain the listing because the data was not presented to support delisting. In December 2002, the RWQCB included data to support the delisting.</p> <p>The tissue sample collected in 1992 is below the Chlordane MTRL guideline and chlordane was not detected in a 1997 tissue sample.</p>
Spatial representation	Two tissue samples.
Temporal representation	Samples were collected in 1992 and 1997.
Data type	Numerical data.
Use of standard method	TSMP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist is based on one sample which is now below the MTRL and chlordane was not detected in 1997.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the RWQCB provided recent data to that support water quality standards were not exceeded. The tissue sample collected in 1992 is now below the Chlordane MTRL guideline and chlordane was not detected in the 1997 tissue sample.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. The evaluation guideline used to interpret narrative water quality standards is adequate. 4. Data are numerical. 5. Standard methods were used.

Region 4: Malibou Lake

Chlordane

8. Other water body information including age of the data were considered.

None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.

Region 4: Malibu Creek

Total Selenium

Water Body	Malibu Creek
Stressor/Media/Beneficial Use	Total Selenium/Water/Aquatic Life (warm and cold freshwater and wildlife habitat, rare and endangered sp., migration of aquatic org, spawn-reproduction), REC-1 and REC-2
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Total Selenium CTR is Linked to Aquatic Life Beneficial, however unclear on the linkage to REC-1 and REC-2.
Utility of measure for judging if standards or uses are not attained	CTRs are applicable to Aquatic Life.
Water Body-specific Information	Data 3-5 years old, samples collected at site, samples collected different years during storm event.
Data used to assess water quality	21 water samples, 2 samples exceeding.
Spatial representation	1 site.
Temporal representation	Samples taken winter-1997; fall and winter 1999.
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than one exceedance of the total selenium chronic water quality criterion to protect freshwater aquatic life.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded, a pollutant or pollution contributes or causes any standards exceedance. There was an inadequate number of samples that exceeded CTR/Basin Plan WQO criteria for listing.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited insufficient spatial and temporal coverage. Also, the two exceeding samples were collected in the same month and year. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the of age of the data were considered.

Region 4: Malibu Creek

Total Selenium

An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.

Region 4: Malibu Creek Watershed [Malibu Creek, Las Virgenes Creek, T + Sedimentation

Water Body	Malibu Creek Watershed [Malibu Creek, Las Virgenes Creek, Triunfo Creek (R1 and R2) and Medea Creek (R1 and R2)]
Stressor/Media/Beneficial Use	Sedimentation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	DFG (Heal the Bay Study)
Linkage between measurement endpoint and beneficial use or standard	Sedimentation and bioassessment are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Bioassessment measurements are applicable to Aquatic Life.
Water Body-specific Information	Data 1 year old, collected at sites, species present, sample collected Spring and fall 2000.
Data used to assess water quality	Bioassessment of micro invertebrate stream community assemblage and physical habitat data submitted by Heal the bay and reviewed by CDFG staff.
Spatial representation	11 sites.
Temporal representation	Spring and Fall 2000.
Data type	Numerical data.
Use of standard method	DFG (California Stream Bioassessment Procedure) methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	List due to excessive sedimentation.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the effects of season and age of the data were considered. <p>An adequate amount of bioassessment measurements indicated biological community degradation.</p>

Region 4: Malibu Lagoon

pH

Water Body	Malibu Lagoon
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Las Virgenas NPDES Municipal Water District
Linkage between measurement endpoint and beneficial use or standard	pH WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 3-5 years old, data measured at site, measured during all seasons.
Data used to assess water quality	138 water samples, 33 samples exceeding pH 8.5
Spatial representation	pH data was collected at various monitoring stations within the lagoon.
Temporal representation	Winter 1997, Summer-Winter 1998, Winter- Fall 1999.
Data type	Numerical data.
Use of standard method	Las Virgenas NPDES Municipal Water District.
Potential Source(s) of Pollutant	Unknown (potential sources septic systems, storm drains and birds).
Alternative Enforceable Program	
RWQCB Recommendation	List due to pH exceedances above of 8.5.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Mandalay Beach

Beach Closures

Water Body	Mandalay Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Ventura County Environmental Health Division
Linkage between measurement endpoint and beneficial use or standard	Beach Closures are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to REC-1.
Water Body-specific Information	Data = 0 - 3 years old. Data measured at waterbody. No beach closures in the last 3 years.
Data used to assess water quality	No Beach Closures in the last 3 years.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Narrative.
Use of standard method	Ventura County Environmental Health Division.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because there were no Beach Closures in the last 3 years.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.

Region 4: Marina del Rey Harbor-Back Basin

Copper

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	Copper/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	Numerical data.
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs do not represent a valid assessment guideline.
SWRCB Staff Recommendation	In the review of the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Marina del Rey Harbor-Back Basin

Lead

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	Lead/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	Numerical data.
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs does not represent a valid assessment guideline.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Marina del Rey Harbor-Back Basin

DDT

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	DDT/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP, TSMP
Linkage between measurement endpoint and beneficial use or standard	DDT ERM/PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM/PELs are applicable to Aquatic Life.
Water Body-specific Information	Data is 5-9 years old.
Data used to assess water quality	18 sediment samples, 3 samples exceeding. Data was omitted in the RWQCB's original fact sheets. In December 2002, the RWQCB include adequate data (toxicity, benthic community assessment and sediment chemistry) to support the delisting. The three samples that exceeded the DDT ERM/PEL guideline were collected in 1994.
Spatial representation	Unknown.
Temporal representation	Samples were collected in 1993, 1994, 1996, and 1997.
Data type	Numerical.
Use of standard method	BPTCP, TSMP.
Potential Source(s) of Pollutant	Historical use of pesticides, stormwater runoff/aerial deposition from urban areas.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because DDT sediment concentrations have dropped below ERM-PEL guidelines.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the list because the RWQCB presented data to support that water quality standards were not exceeded. Data was omitted in the RWQCB's original fact sheets.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including age of the data were considered.

Region 4: Marina del Rey Harbor-Back Basin DDT

An inadequate of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Marina del Rey Harbor-Back Basin

PCBs

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	PCBs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP, TSMP
Linkage between measurement endpoint and beneficial use or standard	PCB ERM/PELs are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 5- 9 years old, collected at site, data collected in different years and seasons.
Data used to assess water quality	18 sediment samples, 7 samples exceeding samples.
Spatial representation	Samples were collected spatially.
Temporal representation	Summer-winter 1993, summer 1996, fall-winter 1997.
Data type	Numerical data.
Use of standard method	BPTCP and TSMP
Potential Source(s) of Pollutant	Historical use of pesticides, stormwater runoff/aerial deposition from urban areas.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Region 4: Marina del Rey Harbor-Back Basin

Zinc

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	Zinc/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs do not represent a valid assessment guidelines.
SWRCB Staff Recommendation	In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Marina Del Rey Harbor-Back Basin

Unknown

Water Body	Marina Del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	Unknown (Benthic Community Degradation)/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP.
Linkage between measurement endpoint and beneficial use or standard	Benthic Community Degradation is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Data was not presented.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	BPTCP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because benthic infauna is only moderately degraded.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because the information indicates that the benthic community infauna is moderately degraded.

Region 4: Marina del Rey Harbor-Back Basin

TBT

Water Body	Marina del Rey Harbor-Back Basin
Stressor/Media/Beneficial Use	TBT/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not applicable to Beneficial Uses.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because EDLs no longer represent a valid assessment guideline.
SWRCB Staff Recommendation	In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: McCoy Canyon Creek

Total Selenium

Water Body	McCoy Canyon Creek
Stressor/Media/Beneficial Use	Total Selenium/Water/Aquatic Life, Warm Freshwater and Wildlife Habitat
Data quality assessment. Extent to which data quality requirements met.	City of Calabasas
Linkage between measurement endpoint and beneficial use or standard	Total Selenium CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life
Water Body-specific Information	Data 1-2 years old, samples collected during multiple seasons.
Data used to assess water quality	33 water samples, 32 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Spring, fall, winter.
Data type	Numerical data.
Use of standard method	City of Calabasas.
Potential Source(s) of Pollutant	Natural and urban sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>In the review of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season, storm events, and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: McCoy Canyon Creek

Nitrate

Water Body	McCoy Canyon Creek
Stressor/Media/Beneficial Use	Nitrate/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	City of Calabasas
Linkage between measurement endpoint and beneficial use or standard	Nitrate WQO is linked to Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Groundwater Recharge.
Water Body-specific Information	Data 1-2 years, data measured at site, sample during multiple seasons.
Data used to assess water quality	51 water samples, 19 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Spring, summer, fall, winter.
Data type	Numerical data.
Use of standard method	City of Calabasas
Potential Source(s) of Pollutant	Nonpoint sources
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: McCoy Canyon Creek

Fecal Coliform

Water Body	McCoy Canyon Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	City of Calabasas
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 1-3 years old, data measured at site, all season samples.
Data used to assess water quality	56 bacterial samples, 38 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Spring, summer, fall, winter.
Data type	Numerical data.
Use of standard method	City of Calabasas.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: McCoy Canyon Creek

Nitrate as Nitrogen

Water Body	McCoy Canyon Creek
Stressor/Media/Beneficial Use	Nitrate as Nitrogen/Water/Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	Maximum Contamination Levels (MCL) are linked Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	MCL are applicable to Groundwater Recharge.
Water Body-specific Information	Data 1-2 years, data measured at site, sample during multiple seasons.
Data used to assess water quality	51 water samples, 19 samples exceeding.
Spatial representation	Samples were collected spatially along the creek.
Temporal representation	Spring-summer-fall 2000 and winter-spring 2001.
Data type	Numerical data.
Use of standard method	City of Calabasas.
Potential Source(s) of Pollutant	Runoff from natural and urban sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of nitrate as nitrogen water quality objectives.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season, storm events, and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: McGrath Beach Beach Closures

Water Body	McGrath Beach
Stressor/Media/Beneficial Use	Beach Closures/Water/REC- 1
Data quality assessment. Extent to which data quality requirements met.	Ventura County Environmental Health Division QA/QC.
Linkage between measurement endpoint and beneficial use or standard	Beach Closures can be linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Beach Closures and Postings are poor measures of whether water quality standards are exceeded, because in many circumstances postings and closures are precautionary measures.
Water Body-specific Information	Data 2 to 3 years old.
Data used to assess water quality	No Beach Closures recorded in the last three years.
Spatial representation	Unknown.
Temporal representation	Unknown.
Data type	Unknown.
Use of standard method	Standard approaches were used.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Other water body- or site-specific information including the age of the data were considered. <p>All of the water quality measurements did not exceed the beach closure guidelines in the last three years. Staff confidence that standards are not exceeded is moderate.</p>

Region 4: McGrath Lake PCBs

Water Body	McGrath Lake
Stressor/Media/Beneficial Use	PCBs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and DFG
Linkage between measurement endpoint and beneficial use or standard	Sediment toxicity and ERM-PEL are linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-9 years old, environmental data measured at site/waterbody.
Data used to assess water quality	13 sediment samples, 7 samples exceeding. Sediment toxicity was observed associated with these chemistry measurements.
Spatial representation	Samples were collected spatially.
Temporal representation	4 different events in 4 different years
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff/aerial deposition from agriculture fields.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan describes how the RWQCB will work with the McGrath State Beach Area Trustee Council to address cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: McGrath Lake

Benthic Community Degradation

Water Body	McGrath Lake
Stressor/Media/Beneficial Use	Benthic Community Degradation/Sediment/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	BPTCP
Linkage between measurement endpoint and beneficial use or standard	A pollutant was not identified. Benthic community degradation is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Benthic community impacts are applicable to Aquatic Life.
Water Body-specific Information	Samples taken at site. Data 4 years old.
Data used to assess water quality	Benthic community impacts were identified as a pollutant rather than a condition of the water body. Pollutants such as PCBs and dieldrin that are recommended for listing cause or contribute to the observed benthic impacts.
Spatial representation	Unknown.
Temporal representation	Samples from one year.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff and aerial deposition from urban and agricultural areas.
Alternative Enforceable Program	
RWQCB Recommendation	List due to benthic community degradation.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because the identified parameter is a condition for a water body and not a pollutant.

Region 4: McGrath Lake Dieldrin

Water Body	McGrath Lake
Stressor/Media/Beneficial Use	Dieldrin/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and DFG.
Linkage between measurement endpoint and beneficial use or standard	Benthic community effects, sediment toxicity, and ERM-PEL is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	ERM-PELs are applicable to Aquatic Life.
Water Body-specific Information	Data 4-9 years old, environmental data measured at site/waterbody.
Data used to assess water quality	13 sediment samples, 10 samples exceeding. Sediment toxicity was observed.
Spatial representation	Samples were collected spatially.
Temporal representation	4 different events in 4 different years.
Data type	Numerical data.
Use of standard method	BPTCP methods.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff/aerial deposition from agriculture fields.
Alternative Enforceable Program	The Consolidated Toxic Hot Spots Cleanup Plan describes how the RWQCB will work with the McGrath State Beach Area Trustee Council to address cleanup of this site. While the planning has progressed, no remediation of the site has occurred. No responsible parties have been identified.
RWQCB Recommendation	List due to exceedances of ERM/PELs.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses are applicable and apply to this water body. 4. The evaluation guideline used to interpret narrative water quality standards is adequate. 5. Data are numerical. 6. Standard methods were used.

Region 4: McGrath Lake Dieldrin

An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: McGrath Lake

Fecal Coliform

Water Body	McGrath Lake
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Ventura Division of Environmental Health Services.
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to REC-1.
Water Body-specific Information	Data 0.5 - 3 years old, samples measured from site.
Data used to assess water quality	29 bacteria samples, 6 sample exceeding the geometric mean of 200/100 mL. Included in the 29 bacteria samples, 16 samples were collected in collected in the Spring of 2002. Five of the sixteen samples exceeded the 400 MPN/100 mL objective.
Spatial representation	5 sites.
Temporal representation	Spring, Summer, and Fall 1999-2000.
Data type	Numerical data.
Use of standard method	Ventura Division of Environmental Health Services.
Potential Source(s) of Pollutant	Agriculture, landfill runoff and natural sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: McGrath Lake

Total Pesticides

Water Body	McGrath Lake
Stressor/Media/Beneficial Use	Total Pesticides/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, stormwater runoff/aerial deposition from agriculture fields.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because individual chemical can be listed for exceedances of ERM-PELs.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because chemicals can be listed individually.

Region 4: Ormond Beach - Arnold Road

Bacterial Indicators

Water Body	Ormond Beach - Arnold Road
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to Bacterial Indicator water quality standard and are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	84 samples, 2 samples exceeding.
Spatial representation	1 station: VC(44000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	None.
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Ormond Beach - J Street drain (50 yards south of drain)

Bacterial Indicators

Water Body	Ormond Beach - J Street drain (50 yards south of drain)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	99 samples, 13 samples exceeding.
Spatial representation	1 station: VC(42000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Ormond Beach - Oxnard Industrial drain (50 yards north of d + Bacterial Indicators

Water Body	Ormond Beach - Oxnard Industrial drain (50 yards north of drain)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards and are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	96 samples, 18 samples exceeding.
Spatial representation	1 station: VC(43000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Peck Road Park Lake

Trash

Water Body	Peck Road Park Lake
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life, REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: Peninsula Beach (Beach area within two rock jetties)

Bacterial Indicators

Water Body	Peninsula Beach (Beach area within two rock jetties)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	102 samples, 19 samples exceeding.
Spatial representation	1 station: VC(23000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	None.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Piru Creek (Tributary to Santa Clara River Reach 4)

pH

Water Body	Piru Creek (Tributary to Santa Clara River Reach 4)
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District.
Linkage between measurement endpoint and beneficial use or standard	pH WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	24 water samples, 4 samples exceeding.
Spatial representation	Samples representative of the Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District.
Potential Source(s) of Pollutant	Nonpoint sources and Conservation Discharge Releases.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of natural sources, season and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.</p>

Region 4: Pole Creek (tributary to Santa Clara River R3)

Sulfate

Water Body	Pole Creek (tributary to Santa Clara River R3)
Stressor/Media/Beneficial Use	Sulfate/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	Sulfate WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	12 water samples, 11 sample exceeding.
Spatial representation	Limited.
Temporal representation	Less than quarterly sampling.
Data type	Numerical data.
Use of standard method	United Water Conservation District
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedance in WQO.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited limited spatial and sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Pole Creek (tributary to Santa Clara River R3)

TDS

Water Body	Pole Creek (tributary to Santa Clara River R3)
Stressor/Media/Beneficial Use	TDS/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	TDS WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	12 water samples, 11 sample exceeding.
Spatial representation	Limited.
Temporal representation	Less than quarterly sampling.
Data type	Numerical data.
Use of standard method	United Water Conservation District.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances in WQO.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited limited spatial and sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Port Hueneme Harbor (back basins)

TBT

Water Body	Port Hueneme Harbor (back basins)
Stressor/Media/Beneficial Use	TBT/Tissue and Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and Army Corp of Engineers
Linkage between measurement endpoint and beneficial use or standard	Sediment chemistry linked to Aquatic Life, however linkage of tissue is unknown.
Utility of measure for judging if standards or uses are not attained	Tissue guidelines do not exist for assessment for TBT.
Water Body-specific Information	Data 1- 6 years old, collected at site, one sample event.
Data used to assess water quality	14 sediment samples in 1996, 20 sediment samples in 2001. Data on the number of samples exceeding was not presented.
Spatial representation	Samples were collected spatially.
Temporal representation	2 years of sampling.
Data type	Numerical data.
Use of standard method	BPTCP and US Army Corps of Engineer methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because guideline for TBT in tissue do not exist and delist TBT in sediment because levels were low.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because there was not a foundation for listing. The tissue measurements could not be evaluated. Assessment guidelines for TBT do not exist. A TBT level in sediment were low.

Region 4: Port Hueneme Harbor (back basins)

PAHs

Water Body	Port Hueneme Harbor (back basins)
Stressor/Media/Beneficial Use	PAHs/Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and Army Corp of Engineers
Linkage between measurement endpoint and beneficial use or standard	Sediment chemistry is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Measurement based on Army Corp of Engineers, PAH were at a low levels.
Water Body-specific Information	Data 1- 6 years old, collected at site, one sample event.
Data used to assess water quality	14 sediment samples in 1996, 20 sediment samples in 2001, 0 samples exceeding.
Spatial representation	Samples were collected spatially.
Temporal representation	2 years of sampling.
Data type	Numerical.
Use of standard method	BPTCP method, US Army Corps of Engineers unknown.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because PAHs appear to be low throughout most of the back basin area based on Army Corps of Engineers data.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. 7. Standard methods were used. 8. Other water body information including the age of the data was considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Port Hueneme Harbor (back basins)

Zinc

Water Body	Port Hueneme Harbor (back basins)
Stressor/Media/Beneficial Use	Zinc/Tissue and Sediment/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and Army Corp of Engineer
Linkage between measurement endpoint and beneficial use or standard	Sediment chemistry linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Tissue guidelines do not exist for assessment for zinc.
Water Body-specific Information	Data 1- 6 years old, collected at site, one sample event.
Data used to assess water quality	14 sediment samples in 1996, 20 sediment samples in 2001, 0 samples exceeding.
Spatial representation	Samples were collected spatially.
Temporal representation	2 years of sampling.
Data type	Numerical data.
Use of standard method	BPTCP and US Army Corps of Engineers methods.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because guideline for zinc in tissue do not exist and delist zinc in sediment because levels were low.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because there was not a foundation for listing. The tissue measurements could not be evaluated. Assessment guidelines for zinc in tissue do not exist. Also zinc levels in sediment were low.

Region 4: Promenade Park - Figueroa Street

Bacterial Indicators

Water Body	Promenade Park - Figueroa Street
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	97 samples, 11 samples exceeding.
Spatial representation	1 station: VC(14000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 4: Promenade Park - Holiday Inn (south of drain at California + Bacterial Indicators

Water Body	Promenade Park - Holiday Inn (south of drain at California Street)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are applicable to Aquatic Life.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	105 samples, 19 samples exceeding.
Spatial representation	1 station: VC(17000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Promenade Park - Oak Street

Bacterial Indicators

Water Body	Promenade Park - Oak Street
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	99 samples, 14 samples exceeding.
Spatial representation	1 station: VC(16000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Promenade Park - Redwood Apartments

Bacterial Indicators

Water Body	Promenade Park - Redwood Apartments
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standard, which are applicable to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	94 samples, 14 samples exceeding.
Spatial representation	1 station: VC(15000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Rincon Beach (150 yards south of creek mouth)

Bacterial Indicators

Water Body	Rincon Beach (150 yards south of creek mouth)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	104 samples, 23 samples exceeding.
Spatial representation	1 station: VC(1050). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Rincon Beach (at end of footpath)

Bacterial Indicators

Water Body	Rincon Beach (at end of footpath)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	101 samples, 15 samples exceeding.
Spatial representation	1 station: VC(1100). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Rincon Beach-50 yards south of creek mouth

Bacterial Indicators

Water Body	Rincon Beach-50 yards south of creek mouth
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	107 samples, 26 samples exceeding.
Spatial representation	1 station: VC(1000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Rio de Santa Clara/Oxnard Drain #3

Chem A

Water Body	Rio de Santa Clara/Oxnard Drain #3
Stressor/Media/Beneficial Use	Chem A/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	Chem A MTRLs are linked to Fish Consumption..
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to Fish Consumption.
Water Body-specific Information	No data was presented.
Data used to assess water quality	No data was presented.
Spatial representation	No data was presented.
Temporal representation	No data was presented.
Data type	Unknown
Use of standard method	No data was presented.
Potential Source(s) of Pollutant	Historical use of pesticides and lubricants, storm water runoff and aerial deposition from agricultural fields.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because listing was based on NAS guidelines, which are outdated. Individual chemicals can be listing for exceedances in MTRLs as appropriate.
SWRCB Staff Recommendation	After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should not be removed from the section 303(d) list because the NAS guidelines are not outdated and remain a valid assessment tools. This guideline should continue to be used until an alternative value is available.

Region 4: Rio Hondo Reach 1

Ammonia

Water Body	Rio Hondo Reach 1
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	There was not new data assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	No new data were submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: Rio Hondo Reach 1

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: Rio Hondo Reach 2

Ammonia

Water Body	Rio Hondo Reach 2
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	There was not new data assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	No new data were submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: Rio Hondo Reach 2

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Antonio Creek (Tributary to Ventura River Reach 4)

Total Nitrogen

Water Body	San Antonio Creek (Tributary to Ventura River Reach 4)
Stressor/Media/Beneficial Use	Total nitrogen/Water/WQO
Data quality assessment. Extent to which data quality requirements met.	Ojai Valley Wastewater Treatment Plant.
Linkage between measurement endpoint and beneficial use or standard	Total Nitrogen WQO is applicable.
Utility of measure for judging if standards or uses are not attained	Exceedance of Basin Plan WQO of 5 mg/L for Nitrogen is applicable.
Water Body-specific Information	Data is 2-6 year old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	23 water samples, 4 samples exceeding.
Spatial representation	2 sites.
Temporal representation	Winter 1998 - Summer 2000.
Data type	Numerical data.
Use of standard method	Ojai Valley Wastewater Treatment Plant
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to greater than 10% exceedance of the nitrogen objective.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: San Buenaventura Beach (Kalorama Street and Sanjon testing + Bacterial Indicators

Water Body	San Buenaventura Beach (Kalorama Street and Sanjon testing sites)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	101 samples, 14 samples exceeding.
Spatial representation	1 station: VC(18000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: San Buenaventura Beach (south of drain at Dover Lane)

Bacterial Indicators

Water Body	San Buenaventura Beach (south of drain at Dover Lane)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	100 samples, 8 samples exceeding.
Spatial representation	1 station: VC(20000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: San Buenaventura Beach (south of drain at San Jon Road)

Bacterial Indicators

Water Body	San Buenaventura Beach (south of drain at San Jon Road)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	103 samples, 20 samples exceeding.
Spatial representation	1 station: VC(19000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 8. Other water body- or site-specific information including the effects of age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: San Buenaventura Beach (south of drain at Weymouth Lane)

Bacterial Indicators

Water Body	San Buenaventura Beach (south of drain at Weymouth Lane)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	97 samples, 2 samples exceeding.
Spatial representation	1 station: VC(20000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: San Gabriel River East Fork

Trash

Water Body	San Gabriel River East Fork
Stressor/Media/Beneficial Use	Trash/Water/Aquatic Life, REC-2
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	TMDL Completed.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been approved by USEPA.

Region 4: San Gabriel River Estuary

Arsenic

Water Body	San Gabriel River Estuary
Stressor/Media/Beneficial Use	Arsenic/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	QAPP
Linkage between measurement endpoint and beneficial use or standard	Arsenic MTRLS are linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	MTRLS guidelines for arsenic do not exist.
Water Body-specific Information	N/A
Data used to assess water quality	Not applicable
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	N/A
RWQCB Recommendation	Delist because there is no longer a MTRL for arsenic.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because MTRL for arsenic in tissue do not exist.

Region 4: San Gabriel River Estuary

Trash

Water Body	San Gabriel River Estuary				
Stressor/Media/Beneficial Use	Trash/Water/REC-1, REC-2 and Aquatic Life				
Data quality assessment. Extent to which data quality requirements met.	Quality assurance information was not provided.				
Linkage between measurement endpoint and beneficial use or standard	Trash is linked to Aquatic Life and REC-2.				
Utility of measure for judging if standards or uses are not attained	Photographs can indicate gross impacts on beneficial uses and whether standards have been exceeded. Measurements of the amounts of trash can provide a relative measure of the potential for nuisance.				
Water Body-specific Information	Photographs of conditions in the estuary were provided. Data on beach and riverbed debris removal were also submitted.				
Data used to assess water quality	<p>Photographic evidence of the accumulation of trash was provided in the vicinity of the confluence of Coyote Creek with the San Gabriel River Estuary. Nineteen photographs were submitted depicting locations along the River and Estuary. The trash included plastic bottles, styrofoam cups, paper wrappers, wood debris, shopping carts, shoes, and other unidentifiable debris.</p> <p style="text-align: center;">Summary of Beach Debris Removal</p> <table> <tr> <td>January-December 2001</td><td>572.43 tons</td></tr> <tr> <td>January-June 2002</td><td>16 tons</td></tr> </table>	January-December 2001	572.43 tons	January-June 2002	16 tons
January-December 2001	572.43 tons				
January-June 2002	16 tons				
Spatial representation	Photographs were taken at two locations. Beach cleanup was conducted at Seal Beach and in the riverbed. It is unknown what percentage of the cleanup volume is from the riverbed.				
Temporal representation	Photographs taken on three dates: 10/29/2000, 11/04/2000, and 11/05/2000. Monthly volunteer trash removal was performed between January 2001 and June 2002.				
Data type	Numerical and Non-numerical data.				
Use of standard method	Unknown.				
Potential Source(s) of Pollutant	Probably storm water discharge.				
Alternative Enforceable Program	The storm water permit could address this problem but likely does not have the enforceable provisions to do so now.				
RWQCB Recommendation	List because of non-attainment of the narrative objective for floating and settleable materials objective described in the Basin Plan.				
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p>				

Region 4: San Gabriel River Estuary

Trash

1. The data is considered to be of unknown quality.
2. The data exhibited insufficient spatial and temporal coverage.

An inadequate amount of the measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.

Region 4: San Gabriel River Estuary

Ammonia as Nitrogen

Water Body	San Gabriel River Estuary
Stressor/Media/Beneficial Use	Ammonia as Nitrogen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Los Angeles County Sanitation District as part of the receiving water monitoring program for the San Jose Creek Water Reclamation Plant.
Linkage between measurement endpoint and beneficial use or standard	Ammonia CTR and WQO is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR and WQO are applicable Aquatic Life.
Water Body-specific Information	Data 2-3 years old, data measure from site, samples taken different seasons and years.
Data used to assess water quality	117 water samples, 34 exceeding samples.
Spatial representation	3 sites.
Temporal representation	Summer 1997, fall 1998, spring 2000.
Data type	Numerical data.
Use of standard method	Los Angeles County Sanitation District as part of the receiving water monitoring program for the San Jose Creek Water Reclamation plant.
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of</p>

Region 4: San Gabriel River Estuary

Ammonia as Nitrogen

	magnitude difference).
RWQCB Recommendation	List due to non attainment of the ammonia aquatic life chronic criteria.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Gabriel River Reach 1

Ammonia

Water Body	San Gabriel River Reach 1
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	No new data were submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: San Gabriel River Reach 1

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Gabriel River Reach 1

Toxicity

Water Body	San Gabriel River Reach 1
Stressor/Media/Beneficial Use	Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data submitted in the 2000 NPDES Annual Monitoring Reports of the Long Beach and Valencia Water Reclamation Plants.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000.
Data used to assess water quality	Chronic toxicity has been detected at receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000 and downstream of the Valencia WRP on the Santa Clara River during 2000. Toxicity identification evaluations have been performed using zeolite filtration to control ammonia toxicity. The test results indicated ammonia was likely the principal cause of toxicity.
Spatial representation	Receiving water stations downstream of the Long Beach WRP on Coyote Creek and downstream of the Valencia WRP on the Santa Clara River.
Temporal representation	Toxicity identification evaluation completed: 1999-2000.
Data type	Numerical data.
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach. If ammonia concentrations are reduced it is very likely that the observed toxicity will be removed as well.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs.</p>

Region 4: San Gabriel River Reach 1
Toxicity

RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Gabriel River Reach 2

Ammonia

Water Body	San Gabriel River Reach 2
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	No new data were submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: San Gabriel River Reach 2

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Gabriel River Reach 3

Toxicity

Water Body	San Gabriel River Reach 3
Stressor/Media/Beneficial Use	Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Data submitted in the 2000 NPDES Annual Monitoring Reports of the Long Beach and Valencia Water Reclamation Plants.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000.
Data used to assess water quality	Chronic toxicity has been detected at receiving water stations downstream of the Long Beach WRP on Coyote Creek in 1999-2000 and downstream of the Valencia WRP on the Santa Clara River during 2000. Toxicity identification evaluations have been performed using zeolite filtration to control ammonia toxicity. The test results indicated ammonia was likely the principal cause of toxicity.
Spatial representation	Receiving water stations downstream of the Long Beach WRP on Coyote Creek and downstream of the Valencia WRP on the Santa Clara River.
Temporal representation	Toxicity identification evaluation completed: 1999-2000.
Data type	Numerical data
Use of standard method	Unknown.
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this reach. If ammonia concentrations are reduced it is very likely that the observed toxicity will be removed as well.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs.</p>

Region 4: San Gabriel River Reach 3
Toxicity

RWQCB Recommendation	None.
SWRCB Staff Recommendation	After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Gabriel River, Reach 2

Dissolved Zinc

Water Body	San Gabriel River, Reach 2
Stressor/Media/Beneficial Use	Dissolved Zinc/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Dissolved Zinc CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	26 water samples, 4 samples exceeding.
Spatial representation	One site.
Temporal representation	Fall, winter, and spring (1997-2000).
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to a greater than 10% exceedance of dissolved zinc recommended water criteria for protection of fresh water aquatic life.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: San Gabriel River, Reach 2

Dissolved Copper

Water Body	San Gabriel River, Reach 2
Stressor/Media/Beneficial Use	Dissolved Copper/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Stormwater Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Dissolved Copper CTR is linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CTR is applicable to Aquatic Life.
Water Body-specific Information	Data 2-5 years old, data measured in waterbody, sample taken different seasons and years.
Data used to assess water quality	26 water samples, 7 samples exceeding.
Spatial representation	1 site (S 14).
Temporal representation	Fall, winter, spring (1997-2000).
Data type	Numerical data.
Use of standard method	Stormwater Monitoring Program.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedances of the dissolved chronic criterion.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: San Jose Creek Reach 1 (SG Confluence to Temple St.)

Ammonia

Water Body	San Jose Creek Reach 1 (SG Confluence to Temple St.)
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	New data was not submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: San Jose Creek Reach 1 (SG Confluence to Temple St.) Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Jose Creek Reach 2 (Temple St. to I 10 at White Ave.)

Ammonia

Water Body	San Jose Creek Reach 2 (Temple St. to I 10 at White Ave.)
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	New data was not submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: San Jose Creek Reach 2 (Temple St. to I 10 at White Ave.) Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: San Jose Creek, Reach 1 (SG Confluence to Temple St.) and R + pH

Water Body	San Jose Creek, Reach 1 (SG Confluence to Temple St.) and Reach 2 (Temple St. to I 10 at White Ave.)
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	San Jose Creek Reclamation Facility
Linkage between measurement endpoint and beneficial use or standard	pH WQO is linked to Aquatic Life. The Basin Plan states: pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharge.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Aquatic Life.
Water Body-specific Information	Data 1-5 years old, data measure in waterbody, samples taken in different years in summer and fall.
Data used to assess water quality	474 water samples, 180 samples exceeding. However, stations downstream of the WWRP are in compliance with the Basin Plan water quality objective. Therefore, it does not appear that the elevated pH levels are a result of waste discharge. There is no storm water or nonpoint source monitoring data available.
Spatial representation	Upstream of San Jose Creek and nonpoint source discharge from urban runoff.
Temporal representation	Throughout 7/1997 and 9/2000.
Data type	Numerical data.
Use of standard method	San Jose Creek Reclamation Facility.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List due to pH exceedance above 8.5.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be excluded from the list because the linkage between the pH level and waste discharge cannot be determined.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. There is no linkage between exceedance in pH values and waste discharge.

Region 4: San Jose Creek, Reach 1 (SG Confluence to Temple St.) and R + pH

Compliance with the water quality standard cannot be determined because there are not data showing the elevated pH levels are a result of waste discharge. Staff confidence that standards were exceeded is low.

Region 4: Santa Clara River Estuary

Chem A

Water Body	Santa Clara River Estuary
Stressor/Media/Beneficial Use	Chem A/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	BPTCP and TSMP
Linkage between measurement endpoint and beneficial use or standard	Chem A NAS guidelines are linked to Aquatic Life .
Utility of measure for judging if standards or uses are not attained	NAS guidelines are applicable to Aquatic Life.
Water Body-specific Information	Data was not presented.
Data used to assess water quality	Data was not presented.
Spatial representation	Data was not presented.
Temporal representation	Data was not presented.
Data type	Data was not presented.
Use of standard method	TSMP and BPTCP methods.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	Originally recommended for delisting because listing was based on NAS outdated guidelines. Reevaluation resulted in a recommendation to maintain on list because Chem A group are not outdated and are still valid guidelines set by NAS to protect aquatic life.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concludes that the water body should not be removed from the section 303(d) list because applicable guidelines are not outdated and there is no new information to support delisting.

Region 4: Santa Clara River Estuary Beach-Surfer's Knoll (area of Bea + Bacterial Indicators

Water Body	Santa Clara River Estuary Beach-Surfer's Knoll (area of Beach adjacent to parking lot)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which is linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	95 samples, 7 samples exceeding.
Spatial representation	1 station: VC(25000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate.</p>

Region 4: Santa Clara River Estuary Beach/Surfer's Knoll

Fecal Coliform

Water Body	Santa Clara River Estuary Beach/Surfer's Knoll
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Ventura Division of Environmental Health Services
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform Ocean Plan standard is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan WQO is applicable to REC-1.
Water Body-specific Information	Data 2-4 years old, samples collected at site, collected during all seasons.
Data used to assess water quality	102 fecal coliform bacteria samples, 0% samples exceeding in 400 MPN/100 ml.
Spatial representation	2 sites.
Temporal representation	Fall, winter, spring, summer, fall (1987-2000).
Data type	Numerical data.
Use of standard method	Ventura Division of Environmental Health Services methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because Ocean Plan WQO for fecal coliform was met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. The evaluation guideline used to interpret narrative water quality standards is adequate. 6. Data are numerical. The Ocean Plan total coliform objective of samples exceeding 1000 MPN/100ml is met. 7. Standard methods were used. 8. Other water body specific information including the effects of season and age of the data were considered. <p>None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Santa Clara River Estuary Beach/Surfer's Knoll

Total Coliform

Water Body	Santa Clara River Estuary Beach/Surfer's Knoll
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Ventura Division of Environmental Health Services
Linkage between measurement endpoint and beneficial use or standard	Total Coliform Ocean Plan standard is linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1.
Water Body-specific Information	Data 2-4 years old, samples collected at site, collected during all seasons.
Data used to assess water quality	102 total coliform bacteria samples, 5 samples exceeding 1000 MPN/100mL.
Spatial representation	2 sites.
Temporal representation	Fall, winter, spring, summer, fall (1987-2000).
Data type	Numerical data.
Use of standard method	Ventura Division of Environmental Health Services methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because Ocean Plan standard for total coliform was met.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. The Ocean Plan total coliform objective of samples exceeding 1000 MPN/100ml is met. 6. Standard methods were used. 7. Other water body specific information including the effects of season and age of the data were considered. <p>An inadequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Santa Clara River Reach 3

Nitrite as Nitrogen

Water Body	Santa Clara River Reach 3
Stressor/Media/Beneficial Use	Nitrite as Nitrogen/Water/Agriculture and Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	POTW and United Water Conservation District, Department of Water Resources
Linkage between measurement endpoint and beneficial use or standard	Nitrite as Nitrogen WQO is linked to Agriculture and Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQO are applicable to Agriculture and Groundwater Recharge.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	70 water samples, 5 samples exceeding.
Spatial representation	Samples are representative of Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	POTW and United Water Conservation District, Department of Water Resources methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List. However reevaluation of data including non detected values at 1/2 the minimum detection level did not exceed Basin Plan Water Quality Objectives for nitrite as nitrogen.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used are applicable. 5. Data are numerical and calculations including non detected values at 1/2 of the minimum detection level were included in the data evaluation. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standards. Staff confidence that standards were not exceeded is moderate.</p>

Region 4: Santa Clara River Reach 3

Total Dissolved Solids

Water Body	Santa Clara River Reach 3
Stressor/Media/Beneficial Use	Total Dissolved Solids/Water/Groundwater Recharge and Agriculture
Data quality assessment. Extent to which data quality requirements met.	POTW, United Water Conservation District, Department of Water Resources
Linkage between measurement endpoint and beneficial use or standard	Basin Plan WQO linked to Agriculture and Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO exceedances are applicable.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	189 water samples, 38 sample exceeding.
Spatial representation	Samples representative of Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	POTW, United Water Conservation District, Department of Water Resources methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other site-specific information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Santa Clara River Reach 3

Nitrite and Nitrate as Nitrogen

Water Body	Santa Clara River Reach 3
Stressor/Media/Beneficial Use	Nitrite and Nitrate as Nitrogen/Water/Agriculture and Groundwater Recharge
Data quality assessment. Extent to which data quality requirements met.	POTW and United Water Conservation District, Department of Water Resources
Linkage between measurement endpoint and beneficial use or standard	Nitrite and Nitrate as Nitrogen WQO linked to Agriculture and Groundwater Recharge.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Agriculture and Groundwater Recharge.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	53 water samples, 5 samples exceeding.
Spatial representation	Samples are representative of Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	POTW and United Water Conservation District, Department of Water Resources methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List. Reevaluation of data including non detected values at 1/2 the minimum detection level still exceeded Basin Plan Water Quality Objectives for nitrate and nitrite as nitrogen.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used are applicable. 5. Data are numerical and calculations including non- detected values at 1/2 of the minimum detection level exceeded water quality objectives. 6. Standard methods were used. 7. Other water body information including the effects of season, storm events, and age of the data were considered.

Region 4: Santa Clara River Reach 3

Nitrite and Nitrate as Nitrogen

An inadequate number of the water quality measurements exceeded the water quality standards. Staff confidence that standards were exceeded is low.

Region 4: Santa Clara River Reach 7

Ammonia

Water Body	Santa Clara River Reach 7
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	New data was not submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources.
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: Santa Clara River Reach 7

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: Santa Clara River Reach 8

Organic Enrichment-Low Dissolved

Water Body	Santa Clara River Reach 8
Stressor/Media/Beneficial Use	Organic Enrichment-Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	<p>Dissolved Oxygen: Collection of data under quality assurance related to NPDES monitoring and RWQCB monitoring related to development of the nitrogen TMDL.</p> <p>Algae data from two sources: Quality assurance for the first dataset performed by scientists from UC Los Angeles; unknown quality assurance associated with data collected by citizen monitoring effort.</p>
Linkage between measurement endpoint and beneficial use or standard	<p>Organic Enrichment-Low Dissolved WQO is linked to Aquatic Life.</p> <p>The RWQCB used the percentage of cover of algae as a surrogate for organic enrichment. No measurements of total organic carbon, dissolved organic carbon, etc. were available. Algae growth can be a result of increased nutrients or decreased cover. Algae measurements by themselves are poor indicators of organic enrichment, because many factors influence algae growth.</p>
Utility of measure for judging if standards or uses are not attained	Organic Enrichment-Low Dissolved WQO is applicable to Aquatic Life. Algae percent cover may or may not be related to organic enrichment.
Water Body-specific Information	Data is up to three years old.
Data used to assess water quality	<p>Dissolved oxygen: 144 samples, 2 samples exceeding.</p> <p>The original listing in 1996 was based on measurements ranging from 4.2 mg/L to 10.8 mg/L (with a mean of 7.4 mg/L).</p> <p>Algae data: 10 observations of floating algae with two of the observations exceeding the threshold (the same threshold used for Malibu Creek).</p>
Spatial representation	Dissolved Oxygen: One site. Algae data: 2 sampling locations (the length of the sampling locations is approximately one mile).
Temporal representation	<p>Dissolved oxygen: All samples taken between 9 a.m. and 2 p.m. Samples collected monthly during 1999 and 2001.</p> <p>Algae data: Sampling was completed in Summer and Fall.</p>
Data type	Numerical data.
Use of standard method	Dissolved Oxygen: NPDES methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list due to poor data distribution.

Region 4: Santa Clara River Reach 8

Organic Enrichment-Low Dissolved

SWRCB Staff Recommendation

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list and place on the Monitoring List because applicable water quality standards are not exceeded and the lack of QA/QC.

This conclusion is based on the staff findings that:

1. The dissolved oxygen data is considered to be of adequate quality.
2. The data exhibited insufficient temporal coverage.
3. Beneficial uses apply to the water body.
4. Other water body- or site-specific information including the effects of age of the data were considered.

An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is moderate. More information is needed because the available data may underestimate standards non-attainment.

Region 4: Santa Clara River Reach 8

Nitrate-nitrogen plus Nitrite-nitrogen

Water Body	Santa Clara River Reach 8
Stressor/Media/Beneficial Use	Nitrate-nitrogen plus Nitrite-nitrogen/Water/Ground Water Recharge (assuming that groundwater would be used as drinking water)
Data quality assessment. Extent to which data quality requirements met.	Collection of data under quality assurance related to NPDES monitoring and RWQCB monitoring related to development of the nitrogen TMDL.
Linkage between measurement endpoint and beneficial use or standard	Nitrate-nitrogen plus Nitrite-nitrogen WQO are linked to Ground Water Recharge.
Utility of measure for judging if standards or uses are not attained	WQOs are applicable to Ground Water Recharge.
Water Body-specific Information	Data is up to five years old.
Data used to assess water quality	44 samples, 1 sample exceeding.
Spatial representation	Three locations were sampled downstream of a point source.
Temporal representation	Data were collected quarterly from 1997 to 2002.
Data type	Numerical data.
Use of standard method	NPDES monitoring and RWQCB sampling used to support the Nitrogen TMDL.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	There is sufficient information to indicate that the nitrification/de-nitrification process being installed at the Saugus WRP will address nitrite problem for this reach.
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Santa Clara River Reach 8

Nitrite-Nitrogen

Water Body	Santa Clara River Reach 8
Stressor/Media/Beneficial Use	Nitrite-Nitrogen/Water/Ground Water Recharge (assuming that groundwater would be used as drinking water)
Data quality assessment. Extent to which data quality requirements met.	NPDES monitoring and RWQCB staff monitoring related to TMDL development.
Linkage between measurement endpoint and beneficial use or standard	Nitrogen water quality objectives are established in the Los Angeles Region Basin Plan for a number of reaches of the Santa Clara River.
Utility of measure for judging if standards or uses are not attained	Measurements of nitrite-nitrogen can be compared to the numeric Basin Plan water quality objective.
Water Body-specific Information	Age of the data is up to five years.
Data used to assess water quality	36 total measurements of nitrite-nitrogen. 15 samples exceed the water quality objective for nitrite-nitrogen. There is sufficient information to indicate that the nitrification/de-nitrification process will address nitrite problem.
Spatial representation	Two sampling stations.
Temporal representation	Data were collected quarterly from 1997 through 2002.
Data type	Numerical data.
Use of standard method	NPDES monitoring.
Potential Source(s) of Pollutant	Point sources, non-point sources, groundwater.
Alternative Enforceable Program	<p>The Saugus Water Reclamation Plant, which discharges at the upstream end of the reach, is in the process of installing nitrification and denitrification (NDN) treatment processes to meet effluent limits in the plant's NPDES permit for ammonia and nitrate plus nitrite.</p> <p>The permit establishes a compliance date of June 12, 2003 to meet receiving water limits for ammonia. The permittee has stated and shown that the NDN facilities will be operational at the Saugus plant by the June, 2003 deadline. The contract has been awarded (nearly \$10 million) to construct the NDN processes.</p> <p>When the NDN facilities are operational the nitrite concentrations will be reduced drastically. Operation of a research NDN facility at the Whittier narrows WRP has shown that NDN will reduce nitrite levels well below the 1 mg/L nitrite water quality objective.</p> <p>The Saugus WRP is the principal (if not sole) source of nitrite in Reach 8. A measurement upstream of the treatment plant had a very low concentration of nitrite (well below the standard). Other measurements down stream show varying levels of nitrite depending on possible plant uptake, conversion of nitrite to other more stable forms of nitrogen, and</p>

Region 4: Santa Clara River Reach 8
Nitrite-Nitrogen

	dilution.
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program List because applicable water quality standards are exceeded but there is a program in place now that will address the problem in 2003.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. Beneficial uses have been established and apply to the water body.4. Water quality standard used is applicable.5. Data are numerical.6. Standard methods were used.7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Santa Clara River Reach 8

Ammonia

Water Body	Santa Clara River Reach 8
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	New data was not assessed for this water body-pollution combination.
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	New data was not submitted that indicates that water quality standards are met.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	Point sources
Alternative Enforceable Program	<p>An alternative enforceable program is in place that will address ammonia water quality standards exceedances for this Reach.</p> <p>In June 1995, the seven water reclamation plants discharging in the San Gabriel River and Santa Clara River watersheds received NPDES permits containing requirements regarding compliance with the Basin Plan water quality objectives for ammonia. In accordance with these permits, the Los Angeles County Sanitation Districts have been pursuing the addition of nitrification and denitrification facilities at each of these plants to comply with the ammonia objectives. By June 2003, it is expected that these new facilities will be operational and ammonia will be drastically reduced.</p> <p>Research facility operation shows that the monthly average ammonia concentration fully complies with the chronic ammonia objective that are expected to be applicable in June 2003.</p> <p>It is probable that the majority of ammonia discharged to this water body was contributed by POTWs. Information in the record indicates that the majority (over 95%) of the ammonia in the Los Angeles River was contributed by POTWs. It is probable that the contribution in the San Gabriel River watershed is dominated by contributions from POTWs as well. Generally, concentrations of ammonia upstream of the treatment plants is much lower than downstream concentrations (up to an order of magnitude difference).</p>
RWQCB Recommendation	None.

Region 4: Santa Clara River Reach 8

Ammonia

SWRCB Staff Recommendation

After reviewing the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed on the Enforceable Program list because applicable water quality standards are exceeded and another program will address the problem.

Region 4: Santa Monica Bay Offshore/Nearshore

Copper

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Copper/Sediment/Marine Habitat Copper/Fish Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk-based values for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Copper are concentrations low relative to thresholds.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (34 mg/kg)</td><td>44%</td><td>13%</td></tr><tr><td>% of Area >ER-M (270 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>30 mg/kg</td><td>12 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>Copper concentrations in fish muscle tissue from approximately 250 samples collected in Santa Monica Bay were below US Fish and Wildlife (1998) screening value of 15 mg/kg ww.</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (34 mg/kg)	44%	13%	% of Area >ER-M (270 mg/kg)	0%	0%	Average concentration	30 mg/kg	12 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (34 mg/kg)	44%	13%											
% of Area >ER-M (270 mg/kg)	0%	0%											
Average concentration	30 mg/kg	12 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance-based.												

Region 4: Santa Monica Bay Offshore/Nearshore Copper

Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore

Arsenic

Water Body	Santa Monica Bay Offshore/Nearshore
Stressor/Media/Beneficial Use	Arsenic/Sediment/Marine Habitat Arsenic/Fish Tissue/Commercial and Sport Fishing
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (No toxics in toxic amounts). Fish tissue data can be compared to risk-based numbers for the protection of human health (No toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).
Data used to assess water quality	Arsenic concentrations fish muscle tissue concentrations in approximately 250 samples were low relative to human-health based screening values of 1.0 mg/kg ww for organic arsenic (OEHHA, 1999). These comparisons were made assuming that organic arsenic comprises 10% of the total arsenic measured in fish tissue.
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.
Data type	Numerical data.
Use of standard method	Performance-based.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality.

Region 4: Santa Monica Bay Offshore/Nearshore Arsenic

2. The data exhibited sufficient spatial and temporal coverage.
3. The evaluation guideline used to interpret narrative water quality standards is adequate.
4. Data are numerical.
5. Standard methods were used.
6. Other water body- or site-specific information including the effects of age of the data were considered.

Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.

Region 4: Santa Monica Bay Offshore/Nearshore

Cadmium

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Cadmium/Sediment/Marine Habitat Cadmium/Fish Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality for fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Cadmium are concentrations low relative to thresholds.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (1.2 mg/kg)</td><td>9%</td><td>17%</td></tr><tr><td>% of Area >ER-M (9.6 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>0.66 mg/kg</td><td>0.72 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>Cadmium concentrations fish muscle tissue from approximately 250 fish samples were low relative to human-health based screening value of 3.0 mg/kg ww (OEHHA, 1998).</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (1.2 mg/kg)	9%	17%	% of Area >ER-M (9.6 mg/kg)	0%	0%	Average concentration	0.66 mg/kg	0.72 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (1.2 mg/kg)	9%	17%											
% of Area >ER-M (9.6 mg/kg)	0%	0%											
Average concentration	0.66 mg/kg	0.72 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance-based.												

Region 4: Santa Monica Bay Offshore/Nearshore Cadmium

Potential Source(s) of Pollutant	Point and non-point sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore

Chromium

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Chromium/Sediment/Marine Habitat Chromium/Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Chromium concentrations are low relative to sediment thresholds.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (1.0 mg/kg)</td><td>45%</td><td>4%</td></tr><tr><td>% of Area >ER-M (3.7 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>85 mg/kg</td><td>45 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>Chromium concentrations in fish muscle tissue from approximately 250 samples were low relative to MTRL of 1.0 mg/kg ww for total chromium.</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (1.0 mg/kg)	45%	4%	% of Area >ER-M (3.7 mg/kg)	0%	0%	Average concentration	85 mg/kg	45 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (1.0 mg/kg)	45%	4%											
% of Area >ER-M (3.7 mg/kg)	0%	0%											
Average concentration	85 mg/kg	45 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance-based.												
Potential Source(s) of Pollutant	Point and non-point sources.												

Region 4: Santa Monica Bay Offshore/Nearshore Chromium

Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore Lead

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Lead/Sediment/Marine Habitat Lead/Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Lead concentrations low relative to thresholds.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (81 mg/kg)</td><td>7%</td><td>22%</td></tr><tr><td>% of Area >ER-M (370 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>22 mg/kg</td><td>40 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>Lead concentrations in fish muscle tissue concentrations from approximately 250 samples were low relative to MTRL of 2.0 mg/kg ww.</p> <p>There is no lead-based consumption advisory for commercial or sport fishing in fish from Santa Monica Bay (OEHHA, 2001).</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (81 mg/kg)	7%	22%	% of Area >ER-M (370 mg/kg)	0%	0%	Average concentration	22 mg/kg	40 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (81 mg/kg)	7%	22%											
% of Area >ER-M (370 mg/kg)	0%	0%											
Average concentration	22 mg/kg	40 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												

Region 4: Santa Monica Bay Offshore/Nearshore Lead

Use of standard method	Performance based.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore

Zinc

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Zinc/Sediment/Marine Habitat Zinc/Fish Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach. Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Zinc concentrations are low relative to thresholds.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (150 mg/kg)</td><td>7%</td><td>0%</td></tr><tr><td>% of Area >ER-M (410 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>84 mg/kg</td><td>61 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>Zinc concentrations in fish muscle tissue from approximately 250 samples were low relative to the Mean International Standard for freshwater fish of 45 mg/kg ww (United Nations, 1983).</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (150 mg/kg)	7%	0%	% of Area >ER-M (410 mg/kg)	0%	0%	Average concentration	84 mg/kg	61 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (150 mg/kg)	7%	0%											
% of Area >ER-M (410 mg/kg)	0%	0%											
Average concentration	84 mg/kg	61 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance-based.												

Region 4: Santa Monica Bay Offshore/Nearshore

Zinc

Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore Silver

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Silver/Sediment/Marine Habitat Silver/Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Silver concentrations are slightly elevated relative to sediment thresholds. The majority of these elevated values are within the zone of influence of the Hyperion outfall.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (1.0 mg/kg)</td><td>71%</td><td>65%</td></tr><tr><td>% of Area >ER-M (3.7 mg/kg)</td><td>13%</td><td>26%</td></tr><tr><td>Average concentration</td><td>1.58 mg/kg</td><td>2.06 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure good in 98% of area.</p> <p>There are no human-health based or wildlife based screening values for evaluating silver concentrations in fish tissue. There is no silver-based consumption advisory for commercial or sport fishing in fish from Santa Monica Bay (OEHHA, 2001).</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (1.0 mg/kg)	71%	65%	% of Area >ER-M (3.7 mg/kg)	13%	26%	Average concentration	1.58 mg/kg	2.06 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (1.0 mg/kg)	71%	65%											
% of Area >ER-M (3.7 mg/kg)	13%	26%											
Average concentration	1.58 mg/kg	2.06 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to PV Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance-based.												

Region 4: Santa Monica Bay Offshore/Nearshore Silver

Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore

Nickel

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Nickel/Sediment/Marine Habitat Nickel/Fish Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Nickel concentrations are low relative to thresholds.</p> <table><tr><td></td><td>1994 (n=55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (21 mg/kg)</td><td>40%</td><td>30%</td></tr><tr><td>% of Area >ER-M (52 mg/kg)</td><td>2%</td><td>0%</td></tr><tr><td>Average concentration</td><td>24 mg/kg</td><td>20 mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>There are no human-health based or wildlife based screening values for evaluating nickel concentrations in fish tissue.</p>		1994 (n=55)	1998 (n=23)	% of Area >ER-L (21 mg/kg)	40%	30%	% of Area >ER-M (52 mg/kg)	2%	0%	Average concentration	24 mg/kg	20 mg/kg
	1994 (n=55)	1998 (n=23)											
% of Area >ER-L (21 mg/kg)	40%	30%											
% of Area >ER-M (52 mg/kg)	2%	0%											
Average concentration	24 mg/kg	20 mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												
Use of standard method	Performance based.												
Potential Source(s) of Pollutant	Point and nonpoint sources.												

Region 4: Santa Monica Bay Offshore/Nearshore Nickel

Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Santa Monica Bay Offshore/Nearshore

Mercury

Water Body	Santa Monica Bay Offshore/Nearshore												
Stressor/Media/Beneficial Use	Mercury/Sediment/Marine Habitat Mercury/Fish Tissue/Commercial and Sport Fishing												
Data quality assessment. Extent to which data quality requirements met.	High quality for sediment data (See QAPP for SCBPP and Bight '98). High quality fish tissue data (See QAPP for Hyperion permit).												
Linkage between measurement endpoint and beneficial use or standard	Habitat quality is related to pollutant concentration (no toxics in toxic amounts). Fish tissue data can be compared to risk based numbers for the protection of human health (no toxics in toxic amounts). Linkages between fish tissue data and uses associated with the protection of fish and wildlife are weak.												
Utility of measure for judging if standards or uses are not attained	Use of sediment guidelines from literature alone is somewhat controversial. However, use of sediment triad (chemistry, benthos, and acute toxicity) in a weight of evidence approach is well established. Fish tissue data provides an additional screen in overall weight of evidence approach.												
Water Body-specific Information	Regional surveys conducted in 1994 and 1998. Rig-fishing in Santa Monica Bay collected by Hyperion (1995-2000).												
Data used to assess water quality	<p>Sediment contaminant concentration, benthic community structure, whole-sediment toxicity tests, fish muscle tissue data. Mercury concentrations are low relative to thresholds.</p> <table><tr><td></td><td>1994 (n = 55)</td><td>1998 (n=23)</td></tr><tr><td>% of Area >ER-L (0.15 mg/kg)</td><td>45%</td><td>48%</td></tr><tr><td>% of Area >ER-M (0.71 mg/kg)</td><td>0%</td><td>0%</td></tr><tr><td>Average concentration</td><td>0.14 mg/kg</td><td>0.16mg/kg</td></tr></table> <p>There is no evidence of acute toxicity in sediments in 1994 (n = 55) or 1998 (n = 23).</p> <p>Benthic community structure assessed as good in 98% to 100% of area in 1994 and 1998 using the Benthic Response Index.</p> <p>The average mercury concentrations in fish muscle tissue from approximately 250 samples collected in Santa Monica Bay were close to the human-health based screening values (OEHHA, 0.3 mg/kg ww). There is no mercury-based consumption advisory for commercial or sport fishing in fish from Santa Monica Bay (OEHHA, 2001).</p>		1994 (n = 55)	1998 (n=23)	% of Area >ER-L (0.15 mg/kg)	45%	48%	% of Area >ER-M (0.71 mg/kg)	0%	0%	Average concentration	0.14 mg/kg	0.16mg/kg
	1994 (n = 55)	1998 (n=23)											
% of Area >ER-L (0.15 mg/kg)	45%	48%											
% of Area >ER-M (0.71 mg/kg)	0%	0%											
Average concentration	0.14 mg/kg	0.16mg/kg											
Spatial representation	Regional surveys entire bay. Point Dume to Palos Verdes Shelf (55 samples in 1994 and 23 samples in 1998). Rig-fishing sites (9) representative of offshore conditions in the Bay.												
Temporal representation	2 years data from Regional Survey. 5 years data on fish tissue.												
Data type	Numerical data.												

Region 4: Santa Monica Bay Offshore/Nearshore Mercury

Use of standard method	Performance-based.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	N/A
RWQCB Recommendation	None.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none">1. The data is considered to be of adequate quality.2. The data exhibited sufficient spatial and temporal coverage.3. The evaluation guideline used to interpret narrative water quality standards is adequate.4. Data are numerical.5. Standard methods were used.6. Other water body- or site-specific information including the effects of age of the data were considered. <p>Most of the water quality measurements do not exceed the water quality standard. The staff confidence that standards are not exceeded is high.</p>

Region 4: Seaside Wilderness Park (400 yards N. of Ventura River)

Bacterial Indicators

Water Body	Seaside Wilderness Park (400 yards N. of Ventura River)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department.
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators are linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to Bacterial Indicator water quality standards which are linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	82 samples, 2 samples exceeding.
Spatial representation	1 station: VC(12000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	Do not list.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the effects of age of the data were considered. <p>An inadequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were not exceeded is high.</p>

Region 4: Sespe Creek (tributary to Santa Clara River Reach 3)

pH

Water Body	Sespe Creek (tributary to Santa Clara River Reach 3)
Stressor/Media/Beneficial Use	pH/Water/Aquatic Life and Agriculture
Data quality assessment. Extent to which data quality requirements met.	POTW and United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	pH WQO linked to Agriculture and Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture and Aquatic Life.
Water Body-specific Information	Data 2 - 5 years old, sample measured from site.
Data used to assess water quality	24 water samples, 6 sample exceeding.
Spatial representation	Samples representative of Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	POTW and United Water Conservation District method.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Sespe Creek (tributary to Santa Clara River Reach 3) Chloride

Water Body	Sespe Creek (tributary to Santa Clara River Reach 3)
Stressor/Media/Beneficial Use	Chloride/Water/Aquatic Life and Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	Chloride WQO is linked to Agriculture and Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture and Aquatic Life.
Water Body-specific Information	Data 2 - 5 years old, sampled measured from site.
Data used to assess water quality	16 water samples, 6 sample exceeding.
Spatial representation	Samples are representative of Reach.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 6. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Surfer's Point at Seaside (End of access path via wooden gate) + Bacterial Indicators

Water Body	Surfer's Point at Seaside (End of access path via wooden gate)
Stressor/Media/Beneficial Use	Bacteria Indicators/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	County Health Department
Linkage between measurement endpoint and beneficial use or standard	Bacterial Indicators linked to REC-1.
Utility of measure for judging if standards or uses are not attained	Data can be compared directly to bacterial indicator water quality standards, which is linked to REC-1.
Water Body-specific Information	Data 3 years old, collected at site.
Data used to assess water quality	20 samples exceeding standards out of 105 samples.
Spatial representation	1 station: VC(13000). This station represents the beach 50 yards on either side of the sampling point.
Temporal representation	Data collected in 1999, 2000, and 2001.
Data type	Numerical data.
Use of standard method	Standard bacteriological methods.
Potential Source(s) of Pollutant	Point and nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information provided by the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient spatial and temporal coverage. 3. Beneficial uses apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body- or site-specific information including the age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Ventura River Estuary

Total Coliform

Water Body	Ventura River Estuary
Stressor/Media/Beneficial Use	Total Coliform/Water/REC-1 and Shellfish Harvesting
Data quality assessment. Extent to which data quality requirements met.	Ojai Valley River Volunteer Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Ocean Plan standards are linked to REC-1 and Shellfish Harvesting.
Utility of measure for judging if standards or uses are not attained	Ocean Plan standards are applicable to REC-1 and Shellfish Harvesting. .
Water Body-specific Information	Data is 2-4 year old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	37 bacteria samples, Total Coliform (8 exceeding at 1000/100) (14 exceeding at 230/100ml and 37 exceeding at 70/100ml).
Spatial representation	1 site.
Temporal representation	Different seasons and years.
Data type	Numerical data.
Use of standard method	Ojai Valley River Volunteer Monitoring Program.
Potential Source(s) of Pollutant	Stables and horse property.
Alternative Enforceable Program	
RWQCB Recommendation	List due to exceedance in Ocean Plan WQO.
SWRCB Staff Recommendation	<p>After reviewing of the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Ventura River Estuary

DDT

Water Body	Ventura River Estuary
Stressor/Media/Beneficial Use	DDT/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	TSMP and BPTCP
Linkage between measurement endpoint and beneficial use or standard	DDT MTRLs are linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to Fish Consumption.
Water Body-specific Information	Data 10 years old, data measured from site, species present, one time sample.
Data used to assess water quality	1 tissue sample (Original listing appears to have been based on DDT concentrations found in shiner surf perch in 1993 (TSM); however, the level of 23 ppb of p,p'-DDE is below MTRL-which equals 32.0 ppb)..
Spatial representation	1 tissue sample.
Temporal representation	One time sample event.
Data type	Numerical data.
Use of standard method	TSMP, BPTCP and NPDES methods.
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be removed from the section 303(d) list because applicable water quality standards are not exceeded. In addition the original listing was based on one sample and concentrations of DDE was below the MTRLs.

Region 4: Ventura River Estuary

Fecal Coliform

Water Body	Ventura River Estuary
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC-1 and Shellfish Harvesting
Data quality assessment. Extent to which data quality requirements met.	Ojai Valley River Volunteer Monitoring Program
Linkage between measurement endpoint and beneficial use or standard	Fecal Coliform WQO is linked to REC-1 and Shellfish Harvesting.
Utility of measure for judging if standards or uses are not attained	WQO are applicable REC-1 and Shellfish Harvesting.
Water Body-specific Information	Data is 2-4 years old, data measured in the waterbody, samples collected different in seasons and years.
Data used to assess water quality	37 bacteria samples, 6 samples exceeding 400 MPN/100ml objective.
Spatial representation	1 site.
Temporal representation	Different seasons and years.
Data type	Numerical data.
Use of standard method	Ojai Valley River Volunteer Monitoring Program.
Potential Source(s) of Pollutant	Stables and horse property.
Alternative Enforceable Program	
RWQCB Recommendation	List due exceedances in Basin Plan WQO.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.</p>

Region 4: Ventura River Reach 1 (Estuary to Main Street) and R2 (Main + Zinc

Water Body	Ventura River Reach 1 (Estuary to Main Street) and R2 (Main Street to Weldon Canyon)
Stressor/Media/Beneficial Use	Zinc/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Use.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable guideline for assessment of beneficial use protection.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original Listing was based on EDLs which do not represent valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ventura River Reach 1 (Estuary to Main Street) and R2 (Main + Silver

Water Body	Ventura River Reach 1 (Estuary to Main Street) and R2 (Main Street to Weldon Canyon)
Stressor/Media/Beneficial Use	Silver/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable guideline for assessment of beneficial use protection.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on EDLs which do not represent valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ventura River Reach 1 (Estuary to Main Street) and R2 (Main + Selenium

Water Body	Ventura River Reach 1 (Estuary to Main Street) and R2 (Main Street to Weldon Canyon)
Stressor/Media/Beneficial Use	Selenium/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Use.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable guideline for assessment of beneficial use protection.
Water Body-specific Information	N/A
Data used to assess water quality	No data presented.
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original Listing was based on EDLs which do not represent valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Ventura River Reach 1 (Estuary to Main Street) and R2 (Main + Copper)

Water Body	Ventura River Reach 1 (Estuary to Main Street) and R2 (Main Street to Weldon Canyon)
Stressor/Media/Beneficial Use	Copper/Tissue/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	TSMP
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Use.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable guideline for assessment of beneficial use protection.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	TSMP methods.
Potential Source(s) of Pollutant	Historical use of pesticides.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original Listing was based on EDLs which do not represent valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Westlake Lake Chlordane

Water Body	Westlake Lake
Stressor/Media/Beneficial Use	Chlordane/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	TSMP QAPP
Linkage between measurement endpoint and beneficial use or standard	Chlordane MTRLs are linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	MTRLs are applicable to Fish Consumption.
Water Body-specific Information	Data is 10- 11 years old.
Data used to assess water quality	<p>2 tissue samples, 0 samples exceeding. The tissue samples collected in 1991 and 1992 are below the MTRL guideline for chlordane.</p> <p>This water body-pollutant combination was recommended to be removed from the section 303(d) list by the RWQCB. The SWRCB staff recommended to maintain the listing because the data was not presented to support delisting. In December 2002, the RWQCB included data to support the delisting.</p>
Spatial representation	Unknown.
Temporal representation	Data was collected in 1991 and 1992.
Data type	Numerical.
Use of standard method	TSMP.
Potential Source(s) of Pollutant	Unknown.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original Listing was based on a tissue concentration that now is below the MTRL guideline for Chlordane.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should removed from the 303(d) list because applicable water quality standards are below the guideline. The RWQCB provided the appropriate data, that was inadvertently missing in their original fact sheet, to support the delisting of this water body-pollutant combination.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of age of the data were considered.

Region 4: Westlake Lake Chlordane

None of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.

Region 4: Westlake Lake Copper

Water Body	Westlake Lake
Stressor/Media/Beneficial Use	Copper/Tissue/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	EDLs are not linked to Beneficial Uses.
Utility of measure for judging if standards or uses are not attained	EDLs are not an applicable guideline for assessment of beneficial use protection.
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	N/A
Alternative Enforceable Program	
RWQCB Recommendation	Delist because the original listing was based on EDLs which no longer represent valid assessment guidelines.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff concluded that the water body should be removed from the section 303(d) list because the applied EDL guidelines are not a valid tool to interpret narrative water quality standards.

Region 4: Wheeler Creek-Todd Barranca

TDS

Water Body	Wheeler Creek-Todd Barranca
Stressor/Media/Beneficial Use	TDS/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	TDS WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO is applicable to Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	12 water samples, 12 sample exceeding.
Spatial representation	Limited.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Region 4: Wheeler Creek-Todd Barranca

Sulfate

Water Body	Wheeler Creek-Todd Barranca
Stressor/Media/Beneficial Use	Sulfate/Water/Agriculture
Data quality assessment. Extent to which data quality requirements met.	United Water Conservation District
Linkage between measurement endpoint and beneficial use or standard	Sulfate WQO is linked to Agriculture.
Utility of measure for judging if standards or uses are not attained	WQO is applicable the Agriculture.
Water Body-specific Information	Data 2-5 years old, samples collected at site.
Data used to assess water quality	12 water samples, 11 sample exceeding.
Spatial representation	Limited.
Temporal representation	Quarterly sampling events.
Data type	Numerical data.
Use of standard method	United Water Conservation District methods.
Potential Source(s) of Pollutant	Nonpoint sources.
Alternative Enforceable Program	
RWQCB Recommendation	List.
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> 1. The data is considered to be of adequate quality. 2. The data exhibited sufficient temporal coverage. 3. Beneficial uses have been established and apply to the water body. 4. Water quality standard used is applicable. 5. Data are numerical. 6. Standard methods were used. 7. Other water body information including the effects of season and age of the data were considered. <p>Most of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

Page left blank intentionally.

Reference List for Region 4

Staff Report

California Regional Water Quality Control Board. Los Angeles Region. 2002. Draft Staff Report. 2002 Update: CWA Section 305(b) Report and Section 303(d) List of Impaired Waters. January 29, 2002. And associated Fact Sheets.

Reports and Information

Aquatic Bioassay and Consulting Laboratories. The Marine Environment of Marina del Rey Harbor, Reports to the Department of Beaches and Harbors, County of Los Angeles, July 1995-June 1996; July 1996-June 1997; July 1997-June 1998; July 1998-June 1999.

California Department of Fish and Game. 1998. Sediment Chemistry, Toxicity and Benthic Community Conditions in Selected Water Bodies of the Los Angeles Region, Final Report to California State Water Resources Control Board, Bay Protection and Toxic Cleanup Program, August 1998.

California Department of Fish and Game, Office of Spill Prevention and Response, Water Pollution Control Laboratory. 1998. A Water Quality Inventory Series: Biological and Physical/Habitat Assessment of California Water Bodies, Calleguas Creek Characterization Study, Benthic Macroinvertebrates (November 1998).

California Office of Environmental Health Hazard Assessment. 2001. California Sport Fish Consumption Advisories. June 2001.

California Regional Water Quality Control Board, Los Angeles Region. 2001. Watershed Management Initiative Chapter. (December 2001).

City of Los Angeles, Bureau of Sanitation. 2001. Low-Flow Diversion of Dry-Weather Runoff. Report to City of Los Angeles' Environmental Quality and Waste Management Committee, January 11, 2001.

Federal Register. 2000. Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule (California Toxics Rule). 40 CFR Part 131. May 18, 2000.

Harrington, James M. 2001. Letter from James M. Harrington, California Department of Fish and Game, to Jonathan S. Bishop, Los Angeles Regional Water Quality Control Board, dated December 6, 2001.

Jones, Howard M. Letter with photographs from Howard M. Jones, Trustee, Lena Jones Trust, to Melinda Becker, Los Angeles Regional Water Quality Control Board, dated April 26, 2001.

Larry Walker and Associates. 2000. Calleguas Creek Characterization Study: Results of the Coordinated Water Quality Monitoring Program, Surface Water Element.

Los Angeles County Department of Public Works. 2001. 1994-2000 Stormwater Monitoring Report. (Excerpt).

Long, E.R., L.J. Field and D.D. MacDonald. 1998. Predicting Toxicity in Marine Sediments with Numerical Sediment Quality Guidelines, Environmental Toxicology and Chemistry 17(4): 714-727.

Los Angeles Regional Water Quality Control Board. 1994. Water Quality Control Plan, Los Angeles Region (Basin Plan).

Los Angeles Regional Water Quality Control Board. 1996. 1996 California Water Quality Assessment – 305(b) Report Supporting Documentation for Los Angeles Region.

MacDonald, D.D. 1994. Approach to the Assessment of Sediment Quality in Florida Coastal Waters, Prepared for the Florida Department of Environmental Regulation, MacDonald Environmental Services, Ltd., Ladysmith, British Columbia.

Masoner, Kim. Letter with photographs from Kim Masoner, President, Seal Beach Chamber and Business Association, to Renee DeShazo, Los Angeles Regional Water Quality Control Board, dated May 11, 2001.

MEC Analytical Systems. 1998. Results of Physical, Chemical and Bioassay Testing of Sediments Collected from the Los Angeles River Estuary, Report to US Army Corps of Engineers, Los Angeles District (September 1998).

MEC Analytical Systems. Report of Testing of Sediments Collected from Marina del Rey Harbor, California, Submitted to US Army Corps of Engineers, Los Angeles District, February 1998; February 1999.

State Water Resources Control Board. 1997a. Water Quality Control Plan, Ocean Waters of California (Ocean Plan).

State Water Resources Control Board. 1997b. Toxic Substances Monitoring Program 1994-95 Data Report (October 1997).

State Water Resources Control Board. 2000. State Mussel Watch Program 1995-1997 Data Report (September 2000).

State Water Resources Control Board. 2001a. Memo to Regional Board Executive Officers from Stan Martinson, Chief, Division of Water Quality, regarding "Solicitation of Water Quality Information."

State Water Resources Control Board. 2001b. Letter to Interested Persons from Stan Martinson, Chief, Division of Water Quality, dated March 14, 2001.

US Army Corps of Engineers, Los Angeles District. 1997. Final Environmental Assessment for Los Angeles River Estuary Maintenance Dredging, Long Beach, California (July 1997).

US Army Corps of Engineers, Los Angeles District. 1999. The Port of Hueneme, California, Deep Draft Navigation Feasibility Study, Final Feasibility Report (August 1999).

US Department of Agriculture, Natural Resources Conservation Service. 1995. Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon, Ventura and Los Angeles Counties, California (May 1995).

United States Environmental Protection Agency. 1997. *Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates: Supplement*

External Data By Organization

California Department of Water Resources, Southern District.

Camarillo Sanitary District. Receiving water data.

Casitas Municipal Water District

City of Calabasas. Adopt-A-Creek water quality data.

City of Los Angeles. L.A.-Glendale and Tillman Water Reclamation Plants' receiving water data.

City of San Buenaventura

City of Thousand Oaks. Conejo Creek supplemental data.

City of Thousand Oaks. Hill Canyon and Olsen Road WWRPs' receiving water data.

County of Los Angeles, Department of Public Works. Stormwater monitoring data.

Heal the Bay. Bioassessment and physical habitat assessment data for Malibu Creek watershed.

Las Virgenes Municipal Water District. Tapia Water Reclamation Facility receiving water data.

Los Angeles County Sanitation Districts. Long Beach, Los Coyotes, Pomona, San Jose Creek, Saugus, Valencia and Whittier Narrows Water Reclamation Plants' receiving water data.

Ojai Valley Sanitation District.

Santa Barbara ChannelKeeper. Ventura River Watershed Monitoring Program.

Santa Monica BayKeeper. BeachKeeper Program: Citizen Water Quality Monitoring Data (January 1996-May 2001). Volumes I & II.

State Water Resources Control Board. Bay Protection and Toxic Cleanup Program.

State Water Resources Control Board. Beach Closure Report.

State Water Resources Control Board. Calleguas Creek toxicity monitoring data.

State Water Resources Control Board. State Mussel Watch Program.

State Water Resources Control Board. Toxic Substances Monitoring Program.

United Water Conservation District.

University of California, Davis. Calleguas Creek toxicity monitoring program data.

Ventura County Department of Health Services. Shoreline bacteriological data.